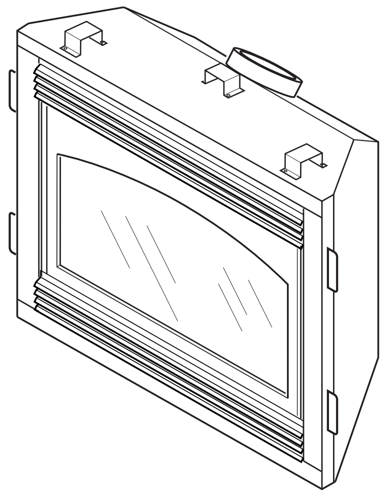
VANGUARD®

DIRECT-VENT FIREPLACE

OWNER'S OPERATION AND INSTALLATION MANUAL



BHDV37N/P, HDV37N/P, BHDV41N/P, AND HDV41N/P

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

FOR YOUR SAFETY
Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
- **Do not touch any electrical switch**
- **Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

— Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

— This appliance is for use only with indicated gas type. It is not convertible for use with other gases, unless a certified kit is used.

This appliance may be installed in an aftermarket* manufactured (mobile) home, where not prohibited by state or local codes.

*** Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer**

Save this manual for future reference.

SAFETY INFORMATION

WARNINGS

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosions, electrical shock, and carbon monoxide poisoning.

DANGER: Carbon monoxide poisoning may lead to death!

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, gas leakage can occur.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the fireplace may not have been installed properly. **Get fresh air at once!** Have fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

WARNING: Any change to this fireplace or its controls can be dangerous.

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
   - shut off gas supply
   - do not try to light any appliance
   - do not touch any electrical switch; do not use any phone in your building
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
   - if you cannot reach you gas supplier, call the fire department.
4. Never install the fireplace
   - in a recreational vehicle
   - where curtains, furniture, clothing, or other flammable objects are less than 42" from the front, top, or sides of the fireplace
   - in high traffic areas
   - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shut-down. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. Do not modify this fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
8. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair this fireplace. Have fireplace inspected annually by a qualified service person.
9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 29.
11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
14. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANS/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1*.
15. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
16. Do not install fireplace directly on carpeting, vinyl tile, or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.
17. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
18. Do not operate fireplace if any log is broken.
19. Do not use a blower insert, heat exchanger insert, or other accessory not approved for use with this fireplace.
20. Do not operate fireplace with glass door removed, cracked, or broken.

PRODUCT IDENTIFICATION

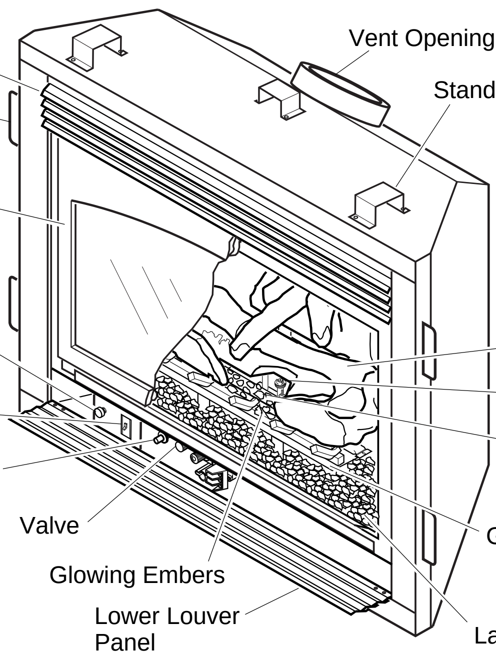


Figure 1 - Vanguard Direct-Vent Fireplace BHDV Series

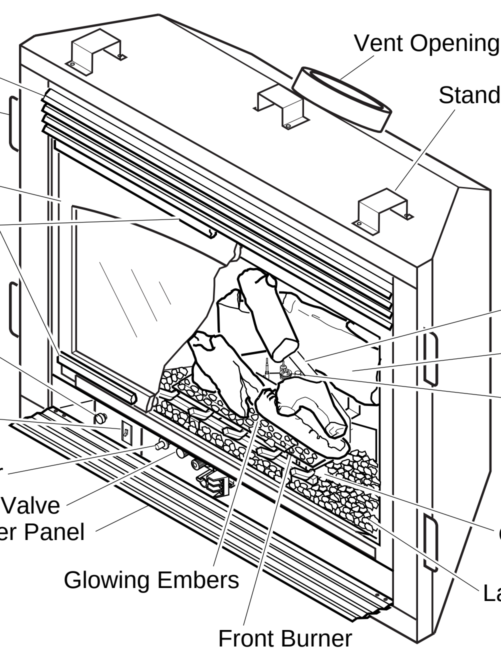


Figure 2 - Vanguard Direct-Vent Fireplace HDV Series

LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence to local codes, use the current *National Fuel Gas Code ANS Z223.1*, also known as NFPA 54* (USA) or the current *CAN/CGA-B149[.1 or .2] Installation Codes* (Canada).

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

PRODUCT FEATURES

OPERATION

This direct-vent fireplace is clean burning and vents easily through outside walls or vertically using outside air for combustion. Heat is generated by both realistic flames and glowing embers. When used without the blower accessory, the fireplace requires no electricity making it ideal for emergency back-up heat.

PIEZO IGNITOR

This fireplace has a piezo ignitor. This system requires no matches, batteries, or other sources to light fireplace.

GLOSSARY OF TERMS

Chase - A box-like enclosure to protect venting from the elements when the venting run is on the outside of a structure.

Mastic - A pliable sealent for use around the vent terminal.

Snorkel Termination - A box that raises the horizontal termination above ground level clearances.

Vent Terminal - Mounted on an outside wall or roof to separate the inlet and outlet of the vent system and protect it from weather.

Vinyl Siding Standoff - A metal box that separates the vent cap from vinyl siding.

Wall Thimble/Firestop - A metal plate used to secure the vent pipe when it passes through a wall or ceiling.

PRE-INSTALLATION PREPARATION

LOCATION AND SPACE REQUIREMENTS

Determine the safest and most efficient location for your Vanguard direct-vent fireplace. Make sure that rafters and wall studs are not in the way of the venting system. Choose a location where the heat output is not affected by drafts, air conditioning ducts, windows or doors. Figure 3 shows some common locations. Read all venting information in this manual. Be aware of all restrictions and precautions before deciding the exact location for your fireplace.

When deciding the location of your fireplace, follow these rules:

1. Do not connect this fireplace to a chimney flue serving a separate solid-fuel burning fireplace or appliance.
2. Due to high temperatures, do not locate this fireplace in high traffic areas or near furniture or draperies.
3. Proper clearances must be maintained.
4. If your fireplace is to be installed directly on carpeting, vinyl tile, or any combustible material other than wood, it must be installed on a metal or wood panel extending the full width and depth of the fireplace. See Figure 4.

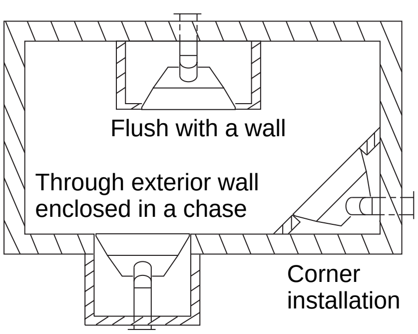
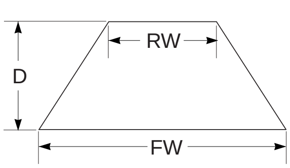


Figure 3 - Common Fireplace Locations



Fireplace size	D	x FW	x RW
37"	18 1/2"	37"	14"
41"	18 1/2"	41"	18"

Figure 4 - Fireplace Bottom Dimensions

CLEARANCES

Minimum clearances to combustibles for the fireplace are as follows:

Back, and sides	0"/mm
Perpendicular walls	6" (152mm)
Floor	0"/mm
Ceiling to louver opening	42" (1067mm)
Front	36" (914mm)
Top of Standoffs	0"/mm

See *General Venting* on page 5 for specific venting clearances.

FRAMING AND FINISHING

Figures 5 and 6 show typical framing of this fireplace. Figure 7 on page 5 shows framing for corner installation. All minimum clearances must be met. Do not install fireplace directly on carpeting, vinyl tile, or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.

See *Accessories* on page 35 for mantel kits available for this fireplace. If you are using a separate combustible mantel piece, refer to Figure 8 on page 5 for proper installation height. You can install noncombustible mantels at any height above the fireplace.

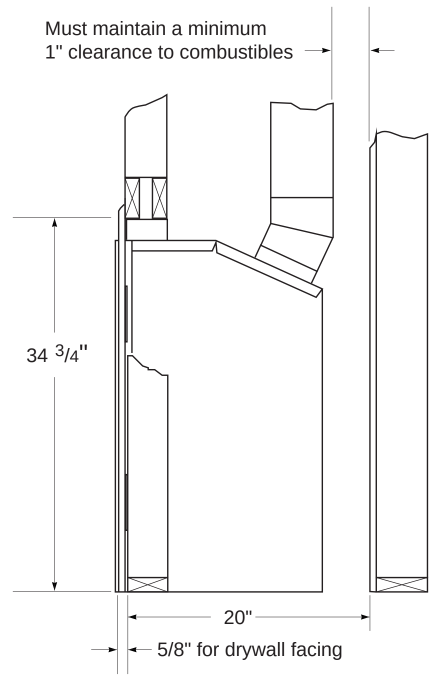
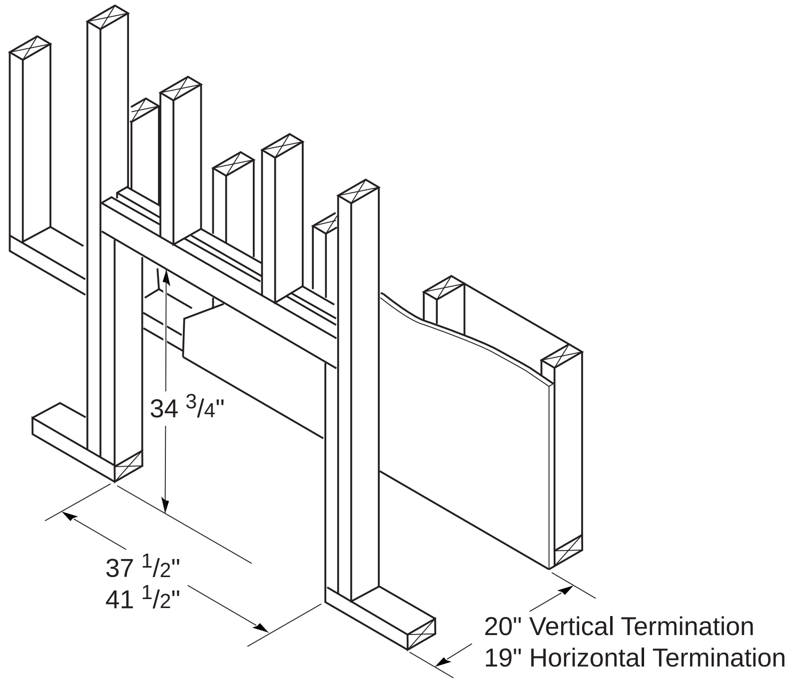


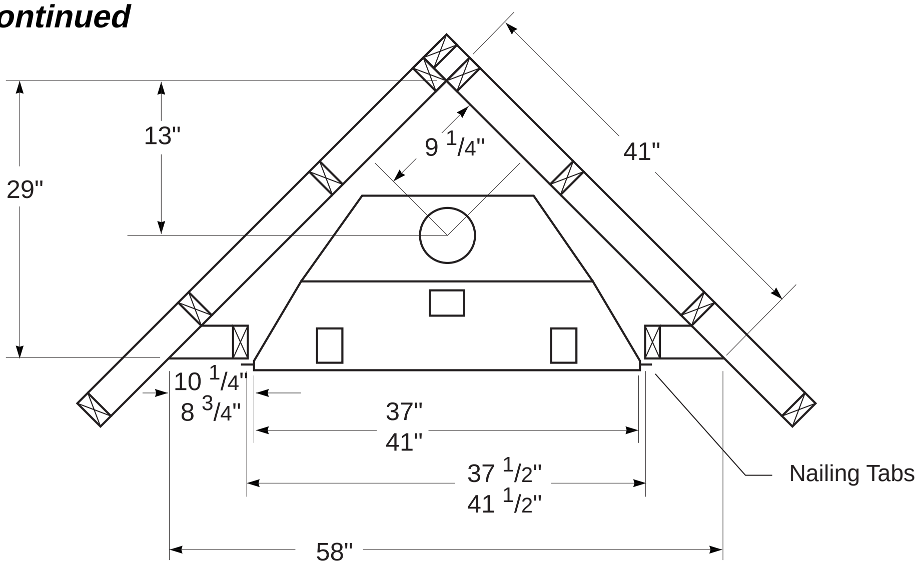
Figure 6 - Framing Clearances for Typical Fireplace Installation



Note: Where two numbers are given the top number is exclusive to the 37" Fireplace and the bottom number is exclusive to the 41" Fireplace

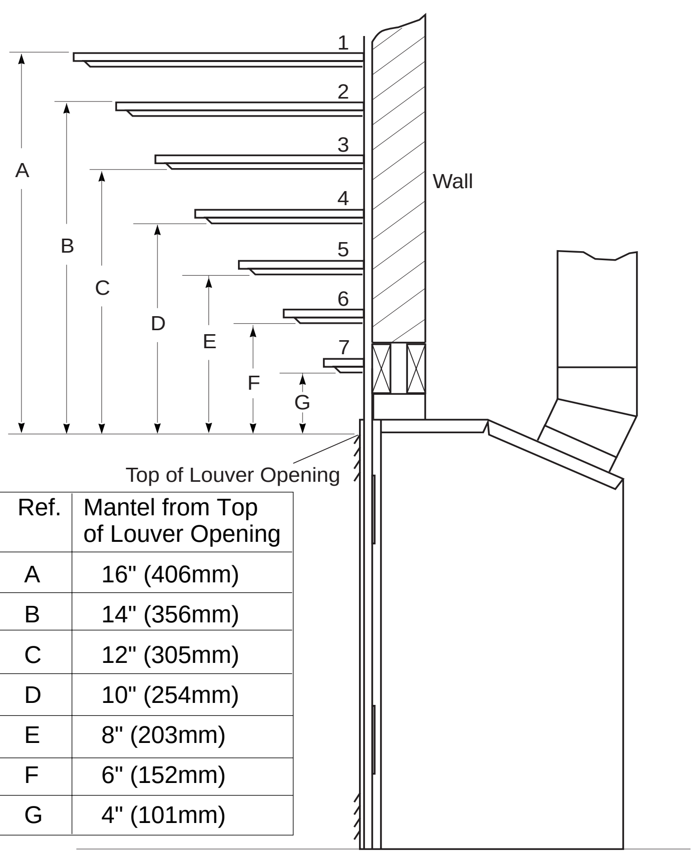
Figure 5 - Framing Clearances for Installation Against an Exterior Wall

PRE-INSTALLATION PREPARATION
Continued



Note: Where two numbers are given the top number is exclusive to the 37" Fireplace and the bottom number is exclusive to the 41" Fireplace

Figure 7 - Framing Clearances for Corner Installation



Ref.	Mantel Depth	Ref.	Mantel from Top of Louver Opening
1	14" (356mm)	A	16" (406mm)
2	12" (305mm)	B	14" (356mm)
3	10" (254mm)	C	12" (305mm)
4	8" (203mm)	D	10" (254mm)
5	6" (152mm)	E	8" (203mm)
6	4" (101mm)	F	6" (152mm)
7	2" (51mm)	G	4" (101mm)

Figure 8 - Clearances for Combustible Mantels

GENERAL VENTING

These models are approved for use with Simpson Dura-Vent 6 5/8" direct-vent pipe components and terminations as well as both flex and rigid Vanguard vent components.

Your fireplace is approved to be vented either through the side wall, or vertically using the following guidelines:

- Only use Vanguard or Simpson Dura-Vent GS venting components or kits specifically approved for this fireplace.
- Minimum clearance between vent pipes and combustible materials is 1" (25 mm), except where stated otherwise.
- Combustible material may be flush with the top front of fireplace with a maximum thichness of 3/4".
- Do not recess venting terminals into a wall or siding.
- Install horizontal venting with a 1/4" rise for every 12" of run toward the termination.
- You may paint the vent terminal with 450ºF (232ºC) heat-resistant paint to coordinate with the exterior finish.
- There must not be any obstruction such as bushes, garden sheds, fences, decks, or utility buildings within 24" from the front of the termination cap.
- Do not locate termination cap where excessive snow or ice build up may occur. Be sure to clear vent termination area after snow falls to prevent accidental blockage of venting system. When using snow blowers, do not direct snow towards vent termination area.

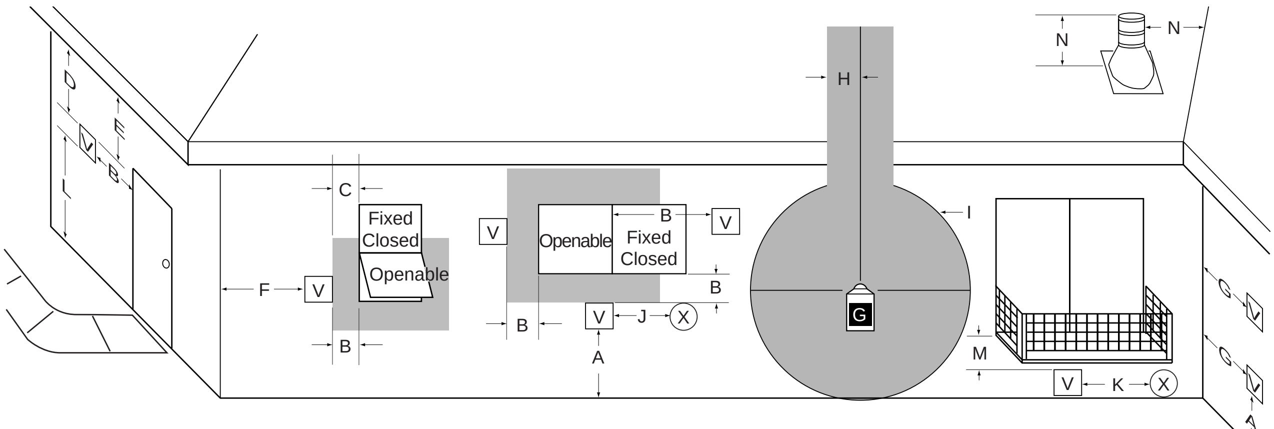
Location of Vent Termination

When locating vent termination, it is important to observe the minimum clearances shown in Figure 9, page 6. You will avoid extra framing by positioning your fireplace against an already existing framing member. The sides of the fireplace may be positioned directly against combustible walls.

*Check with local codes or with the current *CAN/CGA B149[.1 or .2] Installation Codes* for Canada or the USA Installations follow the current *National Fuel Gas Code, ANS Z223.1*, also known as NFPA 54.

Continued

GENERAL VENTING *Continued*



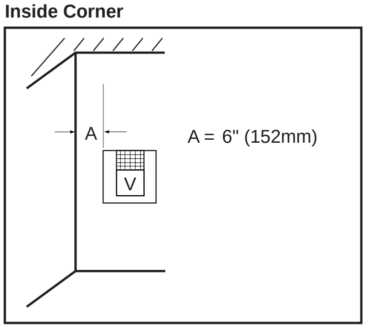
V TERMINATION CAP   X AIR SUPPLY INLET   G GAS METER   RESTRICTED AREA (TERMINATION PROHIBITED)

A = clearance above grade, veranda, porch, deck, or balcony [*12 inches (305mm) minimum]
B = clearance to window or door that may be opened [12 inches (305mm) minimum]
C = clearance to permanently closed window [minimum 12 inches (305mm) recommended to prevent condensation on window]
D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24 inches (610mm) from the center-line of the terminal [18 inches (457mm) minimum]
E = clearance to unventilated soffit [12 inches (305mm) minimum]
F = clearance to outside corner (see below)
G = clearance to inside corner (see below)
H = *not to be installed above a meter/regulator assembly within 36 inches (914mm) horizontally from the center-line of the regulator
I = clearance to service regulator vent outlet [*72 inches (1829mm) minimum]
J = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other fireplace [*12 inches (305mm) minimum]
K = clearance to a mechanical air supply inlet [*72 inches (1829mm) minimum]
L = † clearance above paved side-walk or a paved driveway located on public property [*84 inches (2133mm) minimum]
M = clearance under veranda, porch, deck [*12 inches (305mm) minimum ‡]
N = clearance above a roof shall extend a minimum of 24 inches (610mm) above the highest point when it passes through the roof surface and any other obstruction within a horizontal distance of 18 inches (457mm)

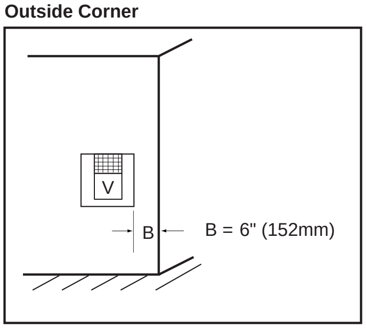
† vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings*
‡ only permitted if veranda, porch, deck or balconey is fully open on a minimum of 2 sides beneath the floor*
* as specified in CAN/SGA B149 (.1 or .2) Installation Codes (1991) for Canada or for U.S.A. installation follow the current *National Fuel Gas Code, ANS Z223.1*
Note: Local codes or regulations may require different clearances

Termination Clearances for Buildings with Combustible and Noncombustible Exteriors

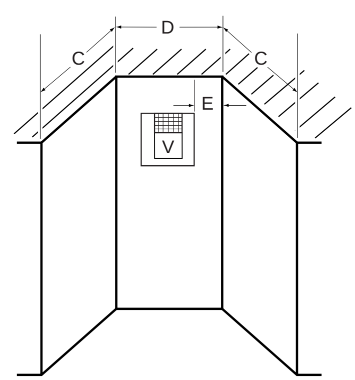
Inside Corner



Outside Corner

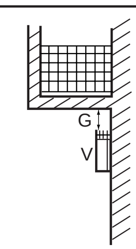


Recessed Location



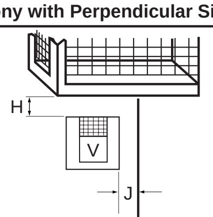
C = Maximum depth of 48" (1219mm) for recessed location
D = Minimum width for back wall of recessed location -
Combustible - 38" (965mm)
Noncombustible - 24" (610mm)
E = Clearance from corner in recessed location-
Combustible - 6" (152mm)
Noncombustible - 2" (51mm)

Balcony with No Side Wall



G = Combustible 24" (610mm)
Noncombustible 18" (457mm)

Balcony with Perpendicular Side Wall



Combustible & Noncombustible
H = 24" (610mm)
J = 20" (508mm)

Figure 9 - Minimum Clearances for Vent Terminations

VENTING INSTALLATION

⚠ WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

⚠ WARNING: Seal all vent connections. Seal only the outer pipe connections with high temperature silicone (600°F/316°C). Before joining elbows and pipes, apply a bead of high temperature silicone sealant (GE RTV 106/Loctite RTV 81585) to the male end of the elbow or pipe. High temperature silicone must also be used to re-seal any connections after maintenance to venting system.

NOTICE: Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this fireplace manual and vent kit instructions.

Only a qualified service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection
- Use extreme caution when using ladders or when on roof tops
- Be aware of electrical wiring locations in walls and ceilings

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component
- Unauthorized modification of the venting system
- Installation of any component part not manufactured or approved by DESA International
- Installation other than as instructed by these instructions

⚠ WARNING: This gas fireplace and vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

⚠ WARNING: Horizontal sections of this vent system require a minimum clearance of 2" from the top of the pipe and 1" minimum to the sides and bottom. Vertical sections of this system require a minimum of 1" clearance to combustible materials on all sides of the pipe.

INSTALLATION PLANNING

There are two basic types of direct-vent installation:

- Horizontal Termination
- Vertical Termination

It is important to select the proper length of vent pipe for the type of termination you choose. It is also important to note the wall thickness.

For Horizontal Termination: Select the amount of vertical rise desired. The horizontal run of venting must have 1/4" rise for every 12" of run towards the termination.

⚠ WARNING: Never run the vent downward as this may cause excessive temperatures which could cause a fire.

You may use one or two 90° elbows in this vent configuration. See *Horizontal Termination Configurations* on pages 10 and 11.

For Vertical Termination: Measure the distance from the fireplace flue outlet to the ceiling. Add the ceiling thickness, the vertical rise in an attic or second story, and allow for sufficient vent height above the roofline. You may use one or two 90° elbows in this vent configuration. See *Vertical Termination Configurations* on pages 13 through 15.

Note: You may use two 45° elbows in place of a 90° elbow. You must follow rise to run ratios when using 45° elbows.

For two-story applications, firestops are required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required.

You may use a chase with a vent termination with exposed pipe on the exterior of the house. See *Installing Vent System in a Chase*, below.

Your Vanguard direct-vent fireplace has been tested for a minimum 3' rise with a maximum 10" wall thickness. The maximum horizontal run is 20' with 8' vertical rise (see *Installation for Horizontal Termination*, page 8). The maximum vertical run is 30' (see *Installation for Vertical Termination*, page 12).

It is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust. Certain limitations apply to vent configurations and must be strictly followed.

Installing Vent System in a Chase

A chase is a vertical box-like structure built to enclose venting that runs along the outside of a building. A chase is not required for such venting.

NOTICE: Treatment of firestops and construction of the chase may vary from building type to building type. These instructions are not substitutes for the requirements of local building codes. You must follow all local building codes.

Note: When installing in a chase, you should insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Minimum clearance between vent pipes and combustible materials such as insulation is 1".

After framing the chase (see *Framing and Finishing* on page 4) install the vent system by following the installation instructions.

Continued

VENTING INSTALLATION

Continued

INSTALLATION FOR HORIZONTAL TERMINATION

1. Determine the route your horizontal venting will take. *Note:* The location of the horizontal vent termination on the exterior wall must meet all local and national building codes and must not be easily blocked or obstructed.

> **WARNING: Do not recess vent terminal into a wall or siding.**

Snorkel terminations are available for terminations requiring a vertical rise on the exterior of the building (see Figures 10 and 11). Snorkel kit SVK is also available (see page 15). Follow the same installation procedures used for standard horizontal terminations. If installing the snorkel termination below grade (basement applications), you must provide proper drainage to prevent water from entering the snorkel termination (see Figure 11). Do not back fill around the snorkel termination.

2. Rigid vent pipes and fittings have special twist-lock connections. Assemble the desired combination of pipe and elbows to the appliance adaptor with pipe seams oriented towards the wall or floor.

   Twist-lock Procedure: The female ends of the pipes and fittings have four indentations (locking lugs). These lugs will slide straight into matching slots on the male ends of adjacent pipes and fittings. (All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7.) Push the pipe sections together and twist one section clockwise approximately one-quarter turn until the sections are fully locked. See Figure 12, page 9. *Note:* Horizontal runs of vent must be supported every three feet. Use wall straps for this purpose.

   Flexible vent pipe must be installed with spacer springs every 12". See Figure 12, page 9. All connections must be clamped tightly and sealed with high temperature silicone sealant as specified in the second warning statement on page 7.

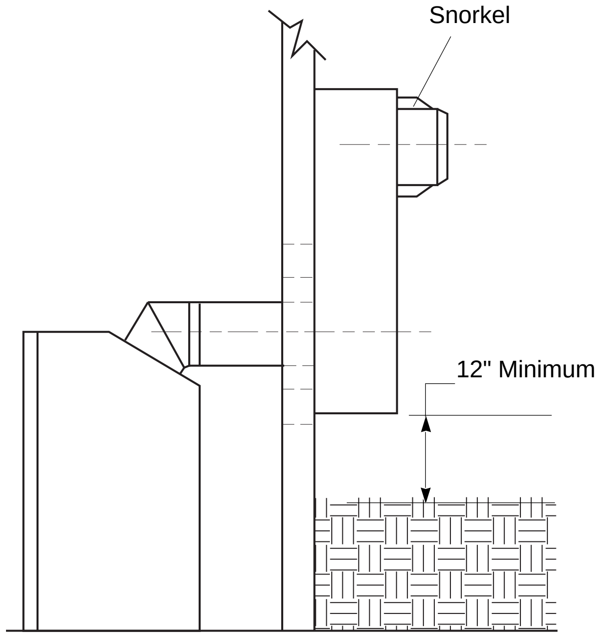


Figure 10 - Snorkel Termination

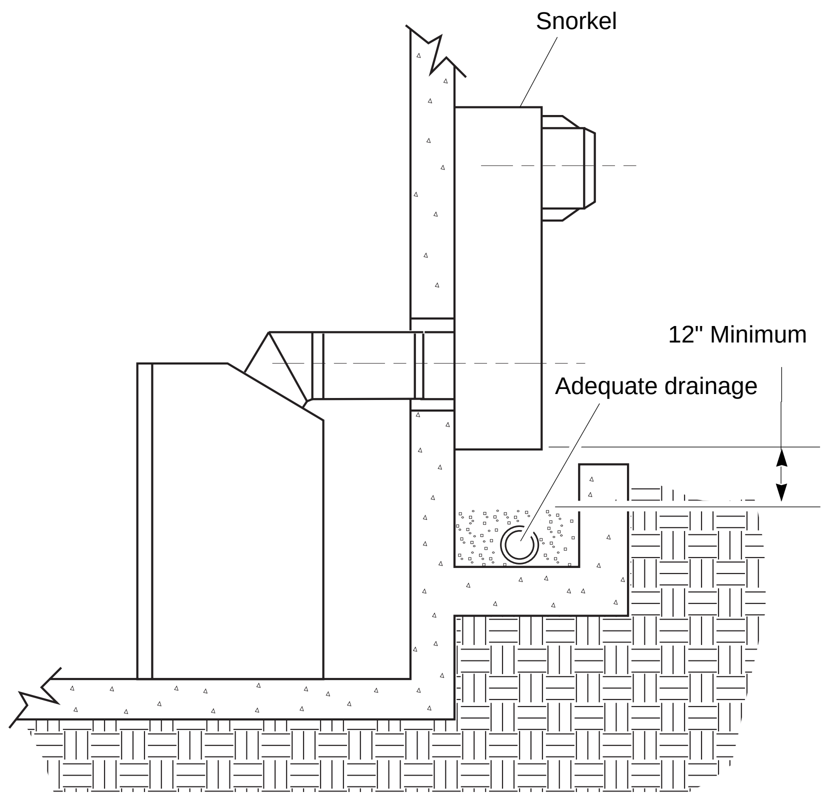


Figure 11 - Snorkel Termination with Drainage Pipe

VENTING INSTALLATION
Continued

3. Attach vent pipe assembly to the fireplace. Set fireplace in front of it's permanent location to insure minimum clearances. Mark the wall for a 10" square hole (for noncombustible material such as masonry block or concrete, a 7 1/2" diameter hole is acceptable). See Figure 13. The center of the hole should line up with the center-line of the horizontal rigid vent pipe. Cut a 10"x10" (254mm x 254mm) square hole through combustible exterior wall (7 1/2" [190mm] diameter hole if noncombustible). Frame as necessary (see Figure 13).

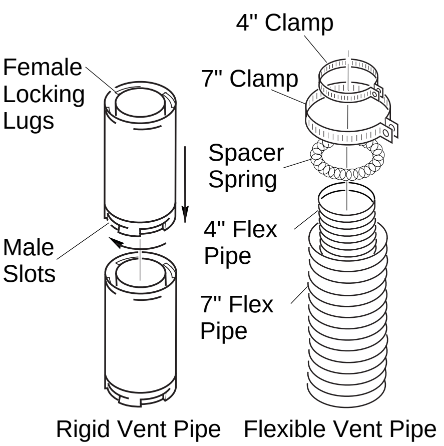


Figure 12 - Vent Pipe Connections

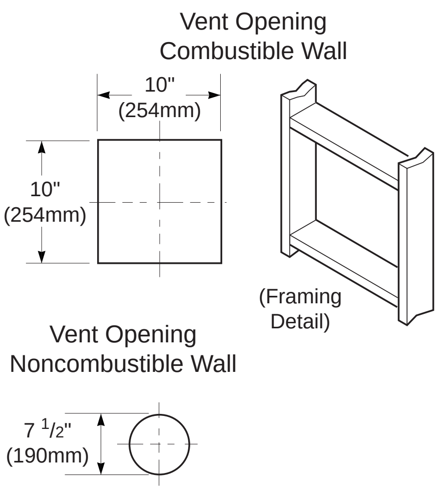


Figure 13 - Vent Opening Requirements

4. Apply a bead of non-hardening mastic around the outside edge of the vent cap. Position the vent cap in the center of the 7 1/2" or 10" hole on the exterior wall with the arrow on the vent cap pointing up. Insure proper clearance of 1" to combustibles is maintained. Attach the vent cap with four wood screws supplied (see Figure 14). *Note*: Replace the wood screws with appropriate fasteners for stucco, brick, concrete, or other types of siding.

WARNING: Do not recess vent termination in to any wall. This will cause a fire hazard.

For vinyl siding use vinyl siding standoffs between vent cap and exterior wall. The vinyl siding standoff prevents excessive heat from melting the vinyl siding material. Bolt the vent cap to the standoff. Apply non-hardening mastic around outside edge of the standoff instead of the vent cap assembly. Use wood screws provided to attach the standoff. See Figure 15.

5. Slide the wall thimble over the vent pipe before connecting the horizontal run to the vent cap (see Figure 16).

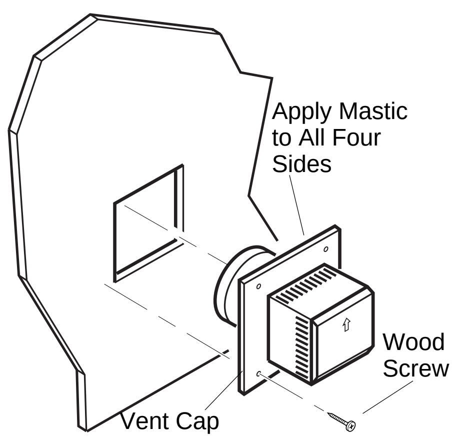


Figure 14 - Installing Horizontal Vent Cap

6. Carefully move the fireplace with vent assembly attached toward the wall and insert the vent pipe into the horizontal termination. The pipe overlap should be a minimum of 1 1/4". Apply silicone to the outer pipe connection. Fasten all vent connections with screws provided. Refer to *Fireplace Installation* on page 16 for instructions on securing unit to framing or floor.
7. Slide the wall thimble against the interior wall surface and attach with screws provided (see Figure 16).

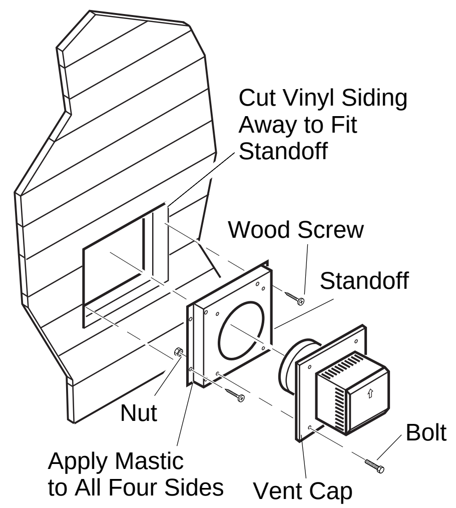


Figure 15 - Installing Vinyl Siding Standoff

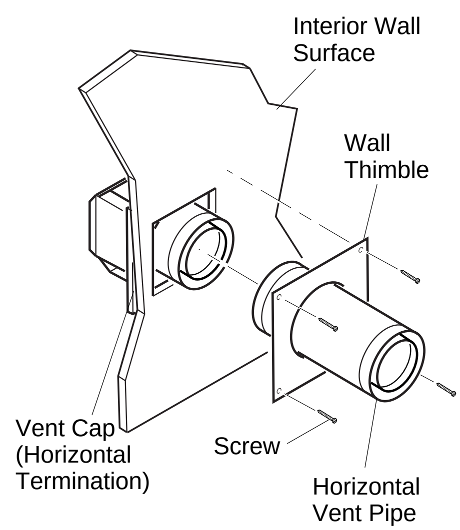


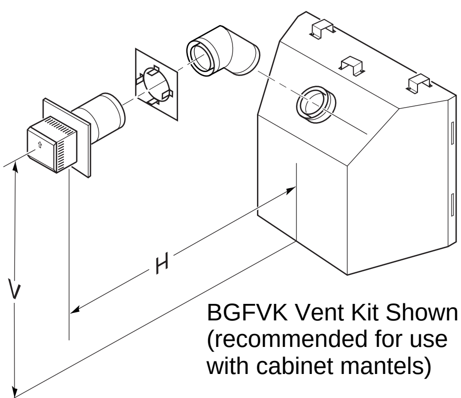
Figure 16 - Connecting Vent Cap with Horizontal Vent Pipe

Continued

VENTING INSTALLATION
Continued

Horizontal Termination Configurations

Figures 17 through 21 show different configurations for venting with horizontal termination. Each figure includes a chart with vertical minimum/maximum and horizontal maximum dimensions which must be met. Seal all connections with high temperature silicone sealant (outer pipe only) as specified in the second warning statement on page 7. All horizontal terminations require 1/4" rise per 12" of horizontal run.



Horizontal Venting

Vertical (V)	Horizontal (H)
37" min.	10" max.

Figure 17 - Horizontal Termination Configuration for Rigid Venting

Horizontal Venting

Vertical (V)	Horizontal (H)
44" min.	29" max.
(30° and 90° only, no vertical pipe)	
55" min.	41" max.
(30° elbow, 1' vertical pipe, 90° elbow)	
67" min.	60" max.
79" min.	84" max.
96" min.	20' max.

Note: This configuration for use with corner installation.

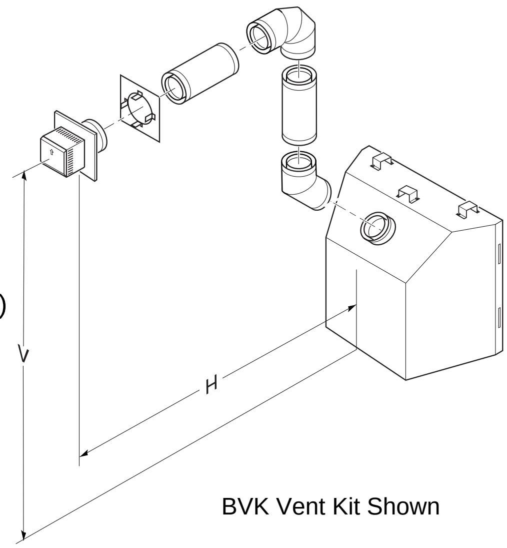


Figure 18 - Horizontal Termination Configuration for Rigid Venting Using One 90° Elbow

Horizontal Venting

See information in Figure 18 for Vertical(V) and Horizontal(H) maximums and minimums. The same amounts apply for flexible venting.

Note: Figure 17 applies to rigid venting only.

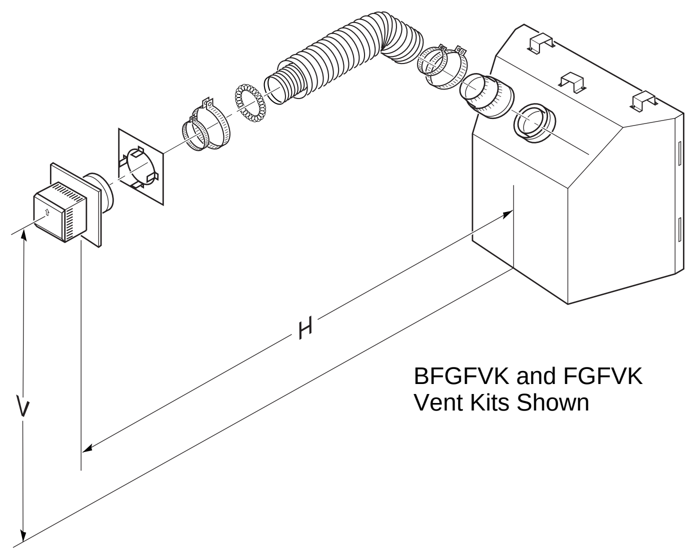


Figure 19 - Horizontal Termination Using Flexible Venting

VENTING INSTALLATION

Continued

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H_1)	Horizontal (H_1) + Horizontal (H_2)
5' min.	2' max.	6' max.
6' min.	4' max.	12' max.
7' min.	6' max.	18' max.
8' min.	8' min.	20' max.
20' max.	8' max.	20' max.

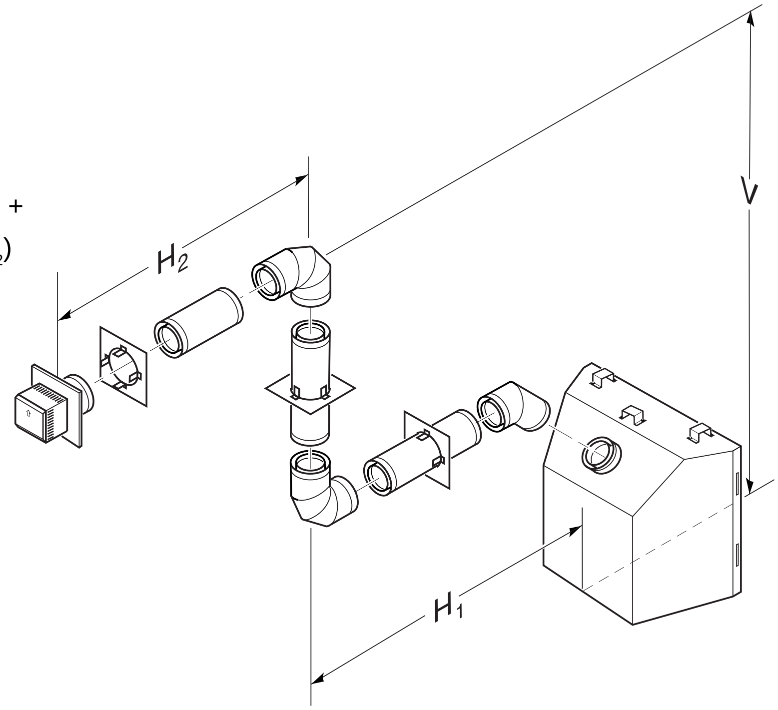


Figure 20 - Horizontal Termination Configuration for Rigid Venting Using Two 90° Elbows

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H_1) + Horizontal (H_2)
5' min.	6' max.
6' min.	12' max.
7' min.	18' max.
8' min.	20' max.
20' max.	20' max.

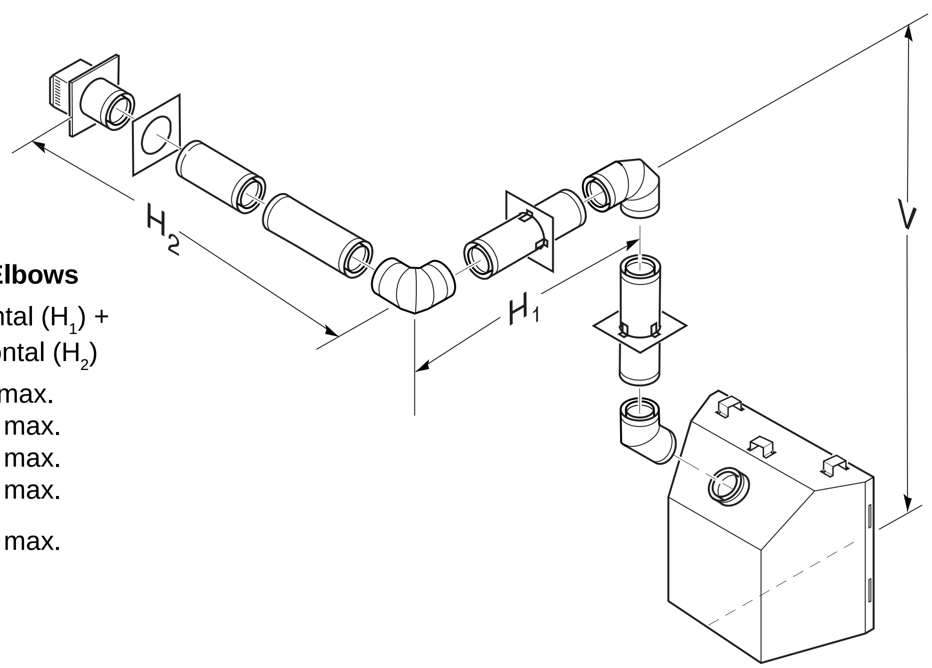


Figure 21 - Horizontal Termination Configuration for Rigid Venting Using Two 90° Elbows with Termination at 90° with Fireplace

Continued

VENTING INSTALLATION
Continued

INSTALLATION FOR VERTICAL TERMINATION

NOTICE: Use rigid pipe only. Flex venting is not to be used with a vertical termination.

1. Determine the route your vertical venting will take. If ceiling joists, roof rafters, or other framing will obstruct the venting system, consider an offset (see Figure 22) to avoid cutting loadbearing members. *Note:* Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack air spaces with insulation. Also note maximum vertical rise of the venting system and any maximum horizontal offset limitations. Offsets must fall within the parameters shown in Figure 9 on page 6.
2. Set the fireplace in desired location. Drop a plumb line down from the ceiling to the position of the fireplace exit flue. Mark the center point where the vent will penetrate the ceiling. Drill a small locating hole at this point.

   Drop a plumb line from the inside of the roof to the locating hole in the ceiling. Mark the center point where the vent will penetrate the roof. Drill a small locating hole at this point.

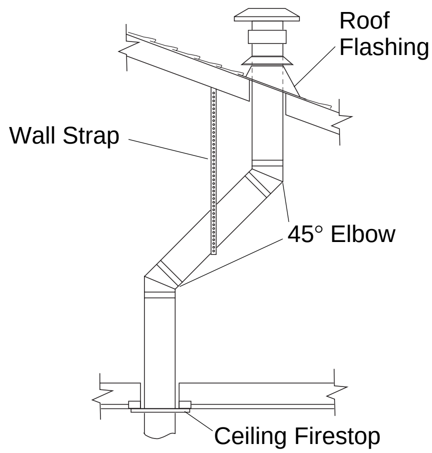


Figure 22 - Offset with Wall Strap and 45° Elbows

Flat Ceiling Installation

1. Cut a 10" square hole in the ceiling using the locating hole as a center point. The opening should be framed to 10"x10" (254mm x 254mm) inside dimensions, as shown in Figure 13 on page 9 using framing lumber the same size as the ceiling joists. If the area above the ceiling is an insulated ceiling or a room, nail firestop from the top side. This prevents loose insulation from falling into the required clearance space. Otherwise, install firestop below the framed hole. The firestop should be installed with no less than three nails per side (see Figure 23).
2. Assemble the desired lengths of pipe and elbows necessary to reach from the fireplace flue up through the firestop. All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7. Be sure all pipe and elbow connections are fully twist-locked (see Figure 12, page 9).
3. Cut a hole in the roof using the locating hole as a center point. (Cover any exposed open vent pipes before cutting hole in roof.) The 10"x10" hole must be measured on the horizontal; actual length may be larger depending on the pitch of the roof. There must be a 1" clearance from the vent pipe to combustible materials. Frame the opening as shown in Figure 13 on page 9.

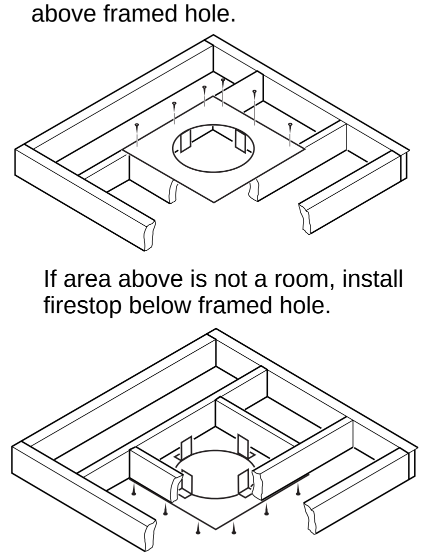


Figure 23 - Installing Firestop

4. Connect a section of pipe and extend up through the hole.

   Note: If an offset is needed to avoid obstructions, you must support the vent pipe every 3 feet. Use wall straps for this purpose (see Figure 22). Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of the flue gases and intake air.
5. Place the flashing over the pipe section(s) extending through the roof. Secure the base of the flashing to the roof and framing with roofing nails. Be sure roofing material overlaps the top edge of the flashing as shown in Figure 22. There must be a 1" clearance from the vent pipe to combustible materials.
6. Continue to add pipe sections until the height of the vent cap meets the minimum building code requirements described in Figure 9 on page 6. *Note*: You must increase vent height for steep roof pitches. Nearby trees, adjoining rooflines, steep pitched roofs, and other similar factors may cause poor draft or down-drafting in high winds. Increasing the vent height may solve this problem.
7. Twist-lock the vent cap onto the last section of vent pipe and seal outer pipe connection with high temperature silicone sealant as specified in the second warning statement on page 7.

Note: If the vent pipe passes through any occupied areas above the first floor, including storage spaces and closets, you must enclose pipe. You may frame and sheetrock the enclosure with standard construction material. Make sure and meet the minimum allowable clearances to combustibles. Do not fill any of the required air spaces with insulation.

Cathedral Ceiling Installation

1. Remove shingles or other roof covering as necessary to cut the rectangular hole for the support box. Mark the outline of the cathedral ceiling support box on the roof sheathing using the locating hole as a center point.
2. Cut the hole 1/8" larger than the support box outline (see Figure 24, page 13).

VENTING INSTALLATION
Continued

3. Lower the support box through the hole in the roof until the bottom of the box extends at least 2" below the ceiling (see Figure 24). Align the support box vertically and horizontally using a level. Temporarily tack the support box in place through the inside walls and into the roof sheathing.
4. Using tin snips, cut the support box from the top corners down to the roofline and fold the resulting flaps over the roof sheathing (see Figure 25). Apply a bead of non-hardening mastic around the top edges of the support box to make a seal between the box and the roof. Nail in place with roofing nails. Remove any combustible material that might be inside of the support box.
5. Complete the cathedral ceiling installation by following the same procedures outlined in steps 2 through 7 for *Flat Ceiling Installation*, page 12.

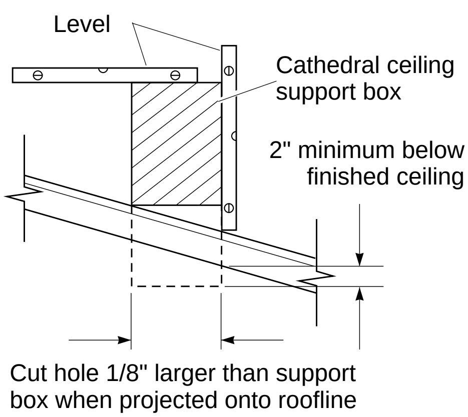


Figure 24 - Cathedral Ceiling Support Box Installation

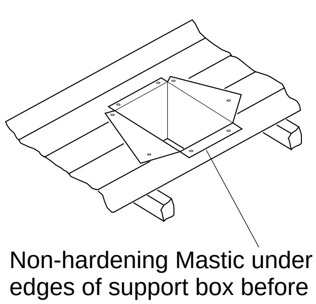
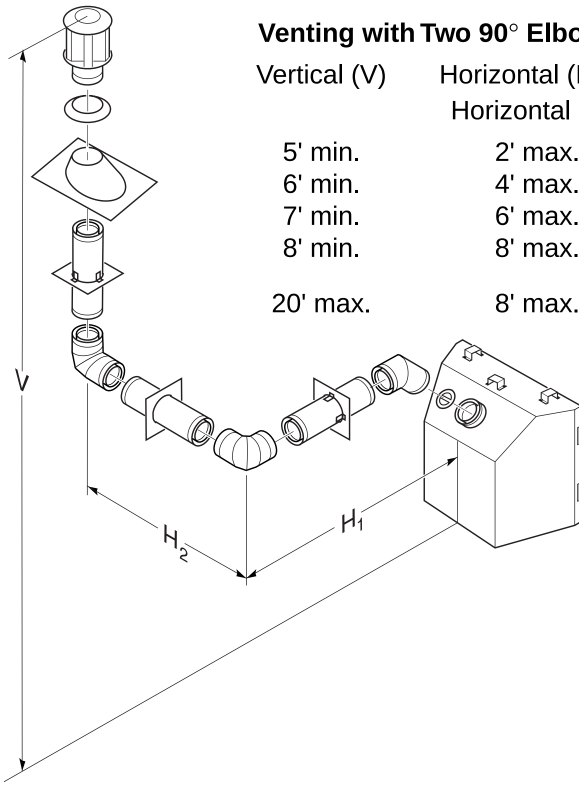


Figure 25 - Installed Cathedral Ceiling Support Box

Vertical Termination Configurations

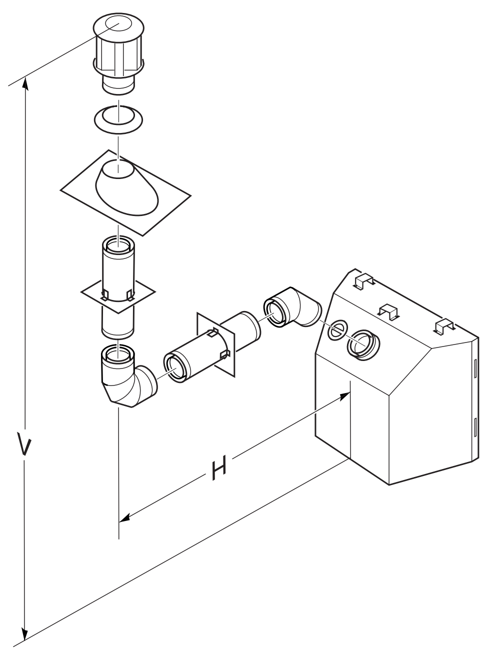
Figures 26 through 29 show four different configurations for vertical termination. All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7.



Venting with Two 90° Elbows

Vertical (V)	Horizontal (H_1) + Horizontal (H_2)
5' min.	2' max.
6' min.	4' max.
7' min.	6' max.
8' min.	8' max.
20' max.	8' max.

Figure 26 - Vertical Rigid Venting Configuration Using Two 90° Elbows with Two Horizontal Runs



Venting with One 90° Elbow

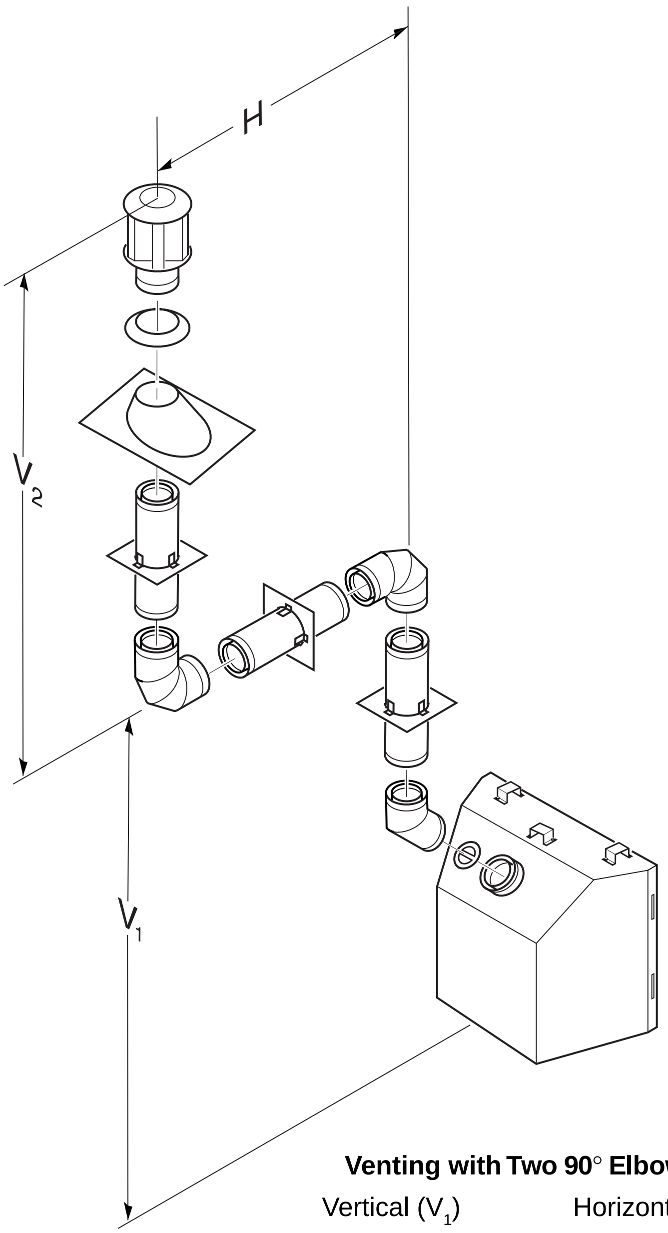
Vertical (V)	Horizontal (H)
5' min.	2' max.
6' min.	4' max.
7' min.	6' max.
8' min.	8' max.
20' max.	8' max.

Figure 27 - Vertical Rigid Venting Configuration Using One 90° Elbow

Continued

VENTING INSTALLATION

Continued

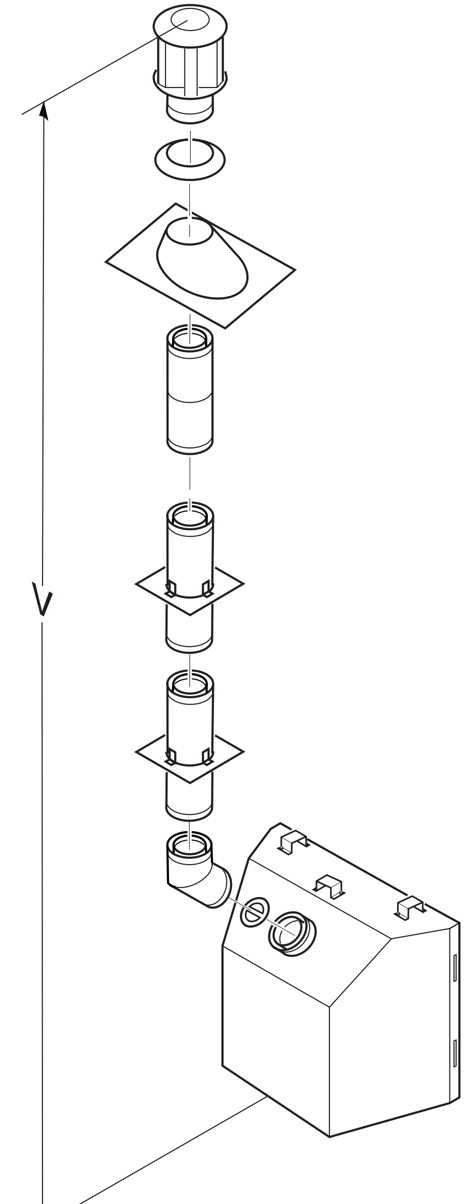


Venting with Two 90° Elbows

Vertical (V_1)	Horizontal (H)
5' min.	6' max.
6' min.	12' max.
7' min.	18' max.
8' min.	20' max.

Note: Vertical (V_1) + Vertical (V_2) = 20' max.

Figure 28 - Vertical Rigid Venting Configuration Using Two 90° Elbows



RVF Kit Shown

Vertical Venting

V = 40' max.

Figure 29 - Vertical Rigid Venting Configuration With No Horizontal Run

VENTING INSTALLATION

Continued

HIGH ALTITUDE INSTALLATION

Your Vanguard direct-vent fireplace has been AGA tested and approved for elevations from 0-2000 feet and CGA certified for elevations from 0-4500 feet.

When installing this fireplace at an elevation above 2000 feet (in the USA), you may need to decrease the input rating by changing the existing burner orifice to a smaller size. Reduce input 4% for each 1000 feet above sea level. Check with your local gas company for proper orifice size identification.

When installing this fireplace at an elevation above 4500 feet (in Canada), check with local authorities.

Consult your local gas company to help determine the proper orifice for your location.

For assistance with any high altitude installation contact DESA International's Technical Services Department at 1-800-DESA-LOG (1-800-337-2564).

PARTS LISTS FOR VENTING KITS AND COMPONENTS

Vanguard Rigid Venting

Number	Description
BGFVK	Basic Ground Floor Rigid Vent Kit Includes: 7" x 60° Elbow, Extended Adjustable Horizontal Termination, Wall Thimble and 14 Screws
GFVK	Ground Floor Rigid Vent Kit Includes: 7" x 60° Elbow, 7" Adjustable Galvanized Coaxial Pipe (7-12"), Wall Thimble, Horizontal Termination, RTV Silicone and 16 Screws
BVK	Basement Rigid Vent Kit Includes: 7" x 30° Elbow, 7" x 4' Galvanized Pipe, 7" x 90° Elbow, 7" Adjustable Galvanized Pipe (7-12"), Wall Thimble, Horizontal Termination, RTV Silicone and 20 Screws

Vanguard Rigid Venting *(Cont.)*

Number	Description
SVK	Snorkel Rigid Vent Kit Includes: 7" x 30° Elbow, 7" x 4' Galvanized Pipe, 7" x 90° Elbow, 7" Adjustable Galvanized Pipe (7-12"), Wall Thimble, 36" Snorkel Termination, RTV Silicone and 28 Screws
RVF	Roof Rigid Vent Kit Includes: Flue Restrictor, Storm Collar, 7" x 30° Elbow, 7" x 4' Galvanized Pipe, 7" x 2' Galvanized Pipe, 7" Adjustable Galvanized Pipe (7-12"), Firestop Support, Roof Flashing, RTV Silicone, Vertical Termination, and 26 screws
D1000	7" x 12" Galvanized Coaxial Pipe (6 pcs.)
D1010	7" x 24" Galvanized Coaxial Pipe (6 pcs.)
D1020	7" x 48" Galvanized Coaxial Pipe (6 pcs.)
D1030	7" Adjustable (7-12") Galvanized Coaxial Pipe (6 pcs.)
D1050	7" x 6" Galvanized Coaxial Pipe (6 pcs.)
D2000	7" x 90° Elbow (6 pcs.)
D2010	7" x 45° Elbow (6 pcs.)
D2020	7" x 30° Elbow (6 pcs.)
D2030	7" x 60° Elbow (6 pcs.)
D3000	Wall Strap/Offset Support (6 pcs.)
D3010	Storm Collar (6 pcs.)
D3020	Wall Thimble (6 pcs.)
D3050	Vertical Restrictor (6 pcs.)
D3060	Ceiling Firestop/Support (6 pcs.)
D3070	Rectangular Horizontal Rigid Vent Termination Cap
D3090	Cathedral Ceiling Support Box
D4000	Roof Flashing 6/12-9/12
D4010	Roof Flashing 9/12-12/12
D4020	Flex Connector (6 pcs.)
D4030	Flex Wall Thimble (6 pcs.)
D4040	4" Hose Clamp (6 pcs.)
D4050	7" Hose Clamp (6 pcs.)
D5000	Wood/Vinyl Siding Standoff (6 pcs.)

Vanguard Flexible Venting

Number	Description
BFGFVK	Basic Flex Ground Floor Vent Kit Includes: Flex Adapter, 7" x 2' Flexible Pipe, 4" x 2' Flexible Pipe, Wall Thimble, Horizontal Termination, (2) Spacer Springs, (2) 4" Hose Clamps, (2) 7" Hose Clamps, and 10 Screws
FGFVK	Flex Ground Floor Vent Kit Includes: Flex Adapter, 7" x 4' Flexible Pipe, 4" x 4' Flexible Pipe, Wall Thimble, Horizontal Termination, (4) Spacer Springs, (2) 4" Hose Clamps, (2) 7" Hose Clamps, RTV Silicone, and 10 Screws
D1040	7" x 25' Coaxial Flex Pipe with Spacer Springs
D3080	Rectangular Horizontal Flex Termination Cap

SIMPSON DURA-VENT GS 4" x 6 5/8"

Number	Description
Available from DESA International:	
SD2040	Simpson Dura-Vent GS 30° Elbow (6 pcs.)
SD2050	Simpson Dura-Vent GS 60° Elbow (6 pcs.)
Available from Simpson Dura-Vent only:	
902	7" x 48" Pipe
903	7" x 36" Pipe
904	7" x 24" Pipe
906	7" x 12" Pipe
907	7" x 9" Pipe
908	7" x 6" Pipe
911	7" Adjustable (11"-14 5/8") Pipe
940	Wall Thimble
941	Cathedral Ceiling Support Box
943	Roof Flashing 0/12-6/12
943S	Roof Flashing 7/12-12/12
945	7" x 45° Elbow
950	Vinyl Siding Standoff
953	Storm Collar
963	Ceiling Firestop
981	36" Snorkel Termination
984	Horizontal Termination Vent Cap
988	Wall Strap
990	7" x 90° Elbow
991	Vertical High Wind Termination

FIREPLACE INSTALLATION

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

⚠ WARNING: A qualified service person must install fireplace. Follow all local codes.

⚠ CAUTION: This fireplace creates warm air currents. These currents move heat to wall surfaces next to fireplace. Installing fireplace next to vinyl or cloth wall coverings or operating fireplace where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

Note: Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing material. See framing details on page 4.

Place the fireplace into position and shim with noncombustible material if needed. Nail the side flanges to the framing to secure the unit in place. There are two floor brackets included with each unit. Use these as an alternative method of securing the fireplace.

IMPORTANT: Make sure fireplace is level before securing. If fireplace is not level it will not work properly.

CHECK GAS TYPE

Use proper gas type for the fireplace unit you are installing. If you have conflicting gas types, do not install fireplace. See dealer where you purchased the fireplace for proper fireplace according to your gas type.

INSTALLING OPTIONAL BLOWER ACCESSORY

NOTICE: If installing blower in an existing fireplace with gas connections, shut off gas supply and disconnect heater from gas supply. Contact a qualified service person to do this.

Attaching Thermal Switch to DA3610T Thermostatically-Controlled Blower

When installing the DA3610T thermostatically-controlled blower accessory, you must first secure the thermal switch to the blower.

1. Remove the two hex head screws on the blower assembly as shown in Figure 30.
2. Place the green wire between the bottom hole on the thermal switch bracket and the bottom hole on the blower assembly. Insert one of the hex screws into all three pieces and tighten.
3. Insert the top screw through the thermal switch bracket and into the blower assembly. Tighten screw.
4. Connect the blue wire on the blower assembly to the right side of the thermal switch.
5. Connect the black wire to the left side of the thermal switch.

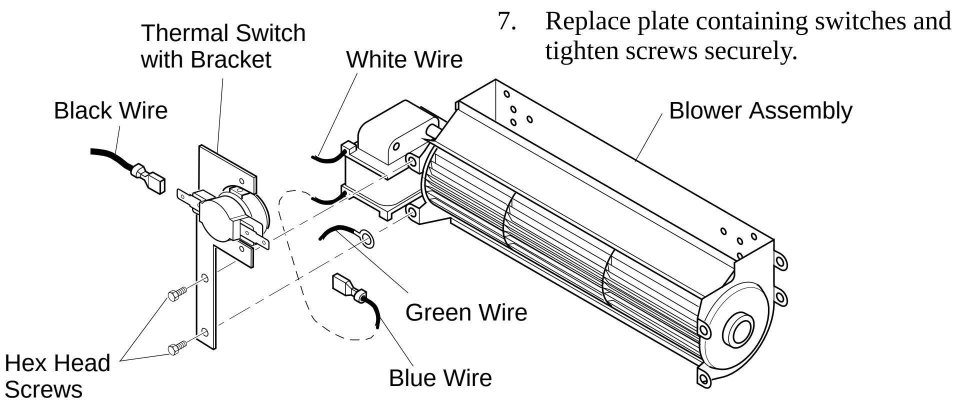


Figure 30 - Attaching Thermal Switch to DA3610T Thermostatically-Controlled Blower Accessory

Installing GA3700/DA3610T Blowers

IMPORTANT: For clarity, gas valve assembly and grate/burner assembly are not shown in Figures 31 through 34, page 17. They will, however, be in your fireplace when you are installing the blower. Also for clarity the firebox is shown with dotted lines.

1. Open lower louver panel or remove for easier access.
2. Place the blower against the lower rear wall of firebox outer wrapper with the exhaust port directed upward. Align the holes in the top mounting tabs of blower with holes in wall of wrapper (see Figure 31, page 17). Using the two screws provided, mount blower and tighten screws securely.

   Note: For DA3610T, make sure the thermal switch is comfortably between the back of the firebox and the blower as shown in Figure 32, page 17.
3. Be sure to securely attach all wire terminals to terminals on blower motor (and thermal switch where applicable) and that the screw retaining the green ground wire is tight.
4. Remove screws securing the plate containing the ON/OFF switch to the bottom of the firebox and set aside.
5. Place speed control against back of this plate and push the plastic control shaft through opening (see Figure 33, page 17).
6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until tight against the plate. Place control knob provided onto shaft (see Figure 33, page 17).
7. Replace plate containing switches and tighten screws securely.

FIREPLACE INSTALLATION
Continued

8. Plug in blower power cord.
   a. **If your fireplace system is installed as a freestanding unit with an accessory mantel,** determine whether the power cord will exit the left side or the right side of the firebox. Install one plastic bushing provided into the 1 1/2" hole in the outer casing through which the power cord will exit. Install the second plastic bushing provided into the floor support bracket if exiting through the right side (see Figure 34). Route power cord through (both) plastic bushing(s) and plug the power cord into a properly grounded 3-prong wall receptacle near the firebox.
   b. **If your fireplace system installation is recessed and/or pre-wired,** a qualified installer must make all electrical connections for the outlet kit included with the fireplace.

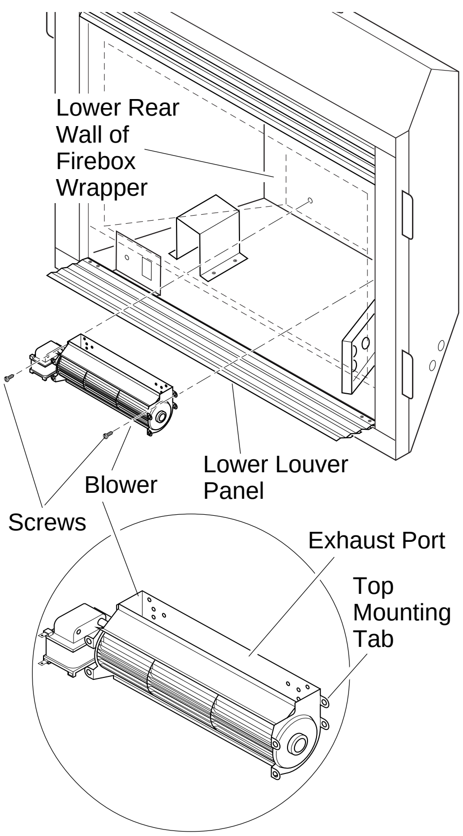


Figure 31 - Mounting Blower to Firebox

9. Check to make sure that the power cord is completely clear of the blower wheel and that there are no other foreign objects in blower wheel. Turn blower on and check for operation. Turn blower off by rotating knob fully counterclockwise before continuing.

> **⚠ WARNING: Never touch the blower wheel while in operation.**

10. Peel off the backing paper and stick the supplied wiring diagram decal on the firebox bottom approximately 3" to the right of the blower speed control bracket (see Figure 34).

> **⚠ WARNING: Failure to position the parts in accordance with supplied diagrams or failure to use only parts specifically approved with this heater may result in damage or personal injury.**

11. Connect or reconnect gas supply to fireplace per *Connecting Fireplace to Gas Supply* on page 19 of this manual.

> **⚠ WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.**

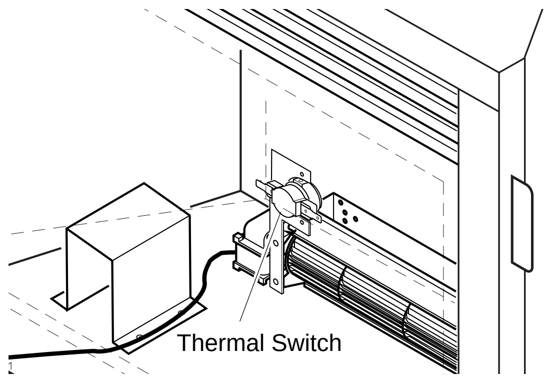


Figure 32 - Locating Thermal Switch Against Back of Firebox

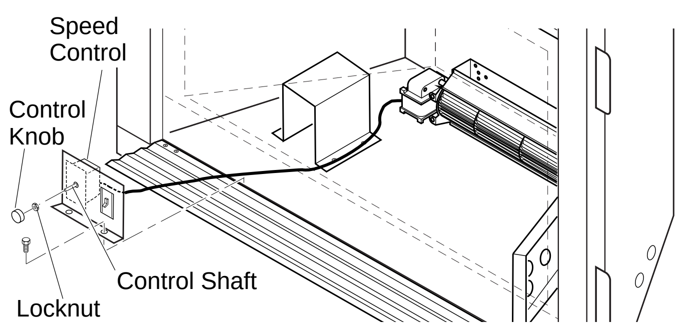


Figure 33 - Attaching Speed Control to Firebox

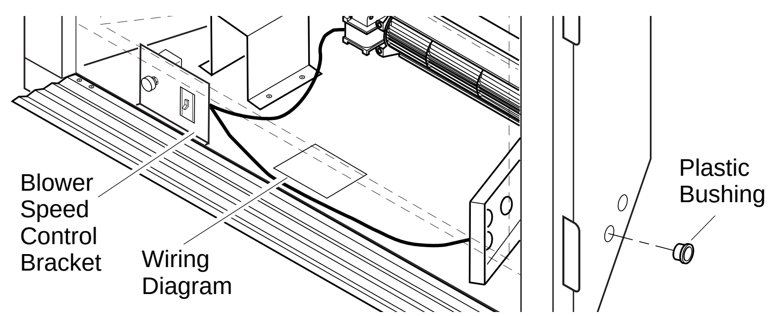


Figure 34 - Installing Plastic Bushing and Wiring Diagram Sticker

Continued

FIREPLACE INSTALLATION
Continued

INSTALLING GAS PIPING TO FIREPLACE LOCATION

WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.

CAUTION: For propane/LP units, never connect heater directly to the propane/LP supply. This heater requires an external regulator (not supplied). Install the external regulator between the heater and propane/LP supply.

Installation Items Needed

Before installing fireplace, make sure you have the items listed below.

- external regulator (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- manual shutoff valve *
- test gauge connection *
- sediment trap
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the A.G.A. design-certified manual shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 35. Pointing the vent down protects it from freezing rain or sleet.

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of pressure will occur.

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 36).

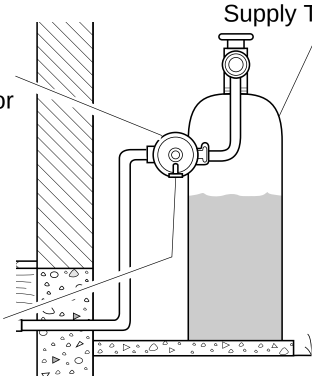


Figure 35 - External Regulator with Vent Pointing Down (Propane/LP Only)

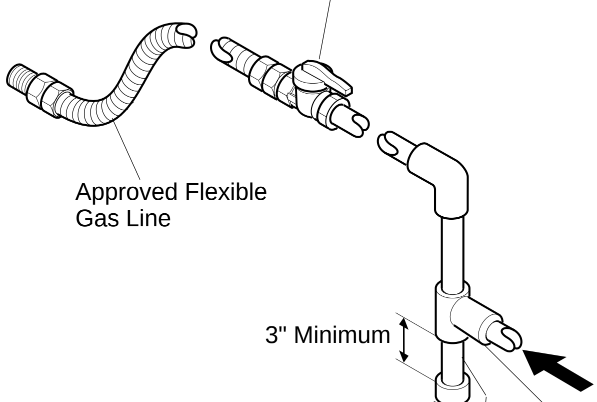


Figure 36 - Gas Connection

* The A.G.A. design-certified manual shutoff valve may be supplied with the appliance or you can purchase it from your dealer.

IMPORTANT: Install main gas valve (manual shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating manual shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves.

CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

We recommend that you install a sediment trap/drip leg in supply line as shown in Figure 36. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap/drip leg is not installed or is installed wrong, fireplace may not run properly.

FIREPLACE INSTALLATION

Continued

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- sealant (resistant to propane/LP gas, not provided)

1. Open lower louver door panel by gently pulling forward.
2. Route flexible gas line (provided by installer) from manual shutoff valve to fireplace. Route flexible gas supply line through one of the access holes on side of fireplace.
3. Attach a 45° flare union gas connector to flexible gas line from gas supply (see Figure 37). Connect flare union to flexible gas line attached to gas regulator of fireplace (see Figure 37).
4. Check all gas connections for leaks. See *Checking Gas Connections*.

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply commercial leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

1. Disconnect fireplace and its individual manual shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig (3.5 kPa) will damage fireplace gas regulator.
2. Cap off open end of gas pipe where manual shutoff valve was connected.
3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace, or using compressed air.
4. Check all joints of gas supply piping system. Apply commercial leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.
5. Reconnect fireplace and manual shutoff valve to gas supply. Check reconnected fittings for leaks.

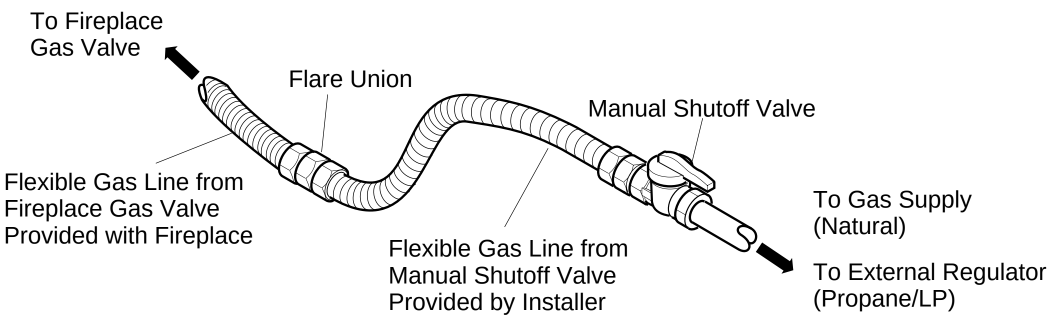


Figure 37 - Attaching Flexible Gas Lines Together

Continued

FIREPLACE INSTALLATION
Continued

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close manual shutoff valve (see Figure 38).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace, or using compressed air.
3. Check all joints from propane/LP supply tank or gas meter to manual shutoff valve (see Figure 39 for propane/LP or Figure 40 for natural). Apply commercial leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Fireplace Gas Connections

1. Open manual shutoff valve (see Figure 38).
2. Open propane/LP supply tank valve for propane/LP fireplace or main gas valve located on or near gas meter for natural gas fireplace.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from manual shutoff valve to thermostat gas valve (see Figure 39 for propane/LP or Figure 40 for natural). Apply commercial leak test solution to all gas joints. Bubbles forming show a leak. Correct all leaks at once.
5. Light fireplace (see *Operating Fireplace*, pages 26 through 28). Check all other internal joints for leaks.
6. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 26).

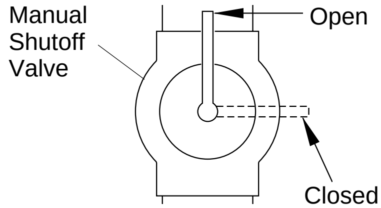


Figure 38 - Manual Shutoff Valve

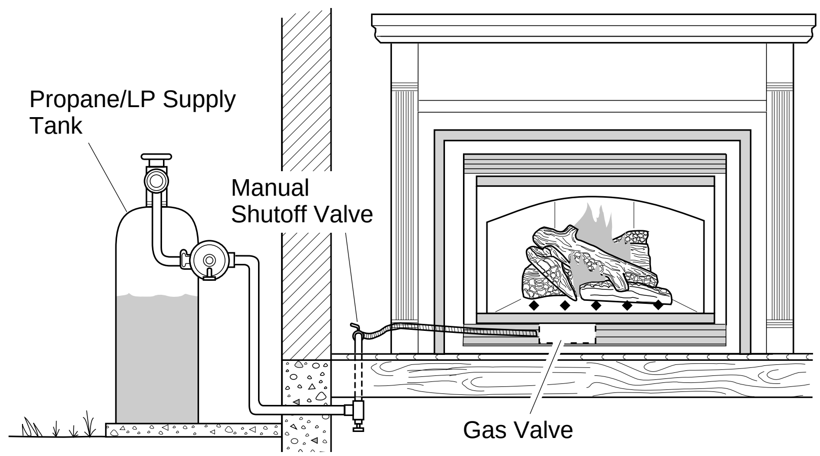


Figure 39 - Checking Gas Joints for Propane/LP Gas Fireplace

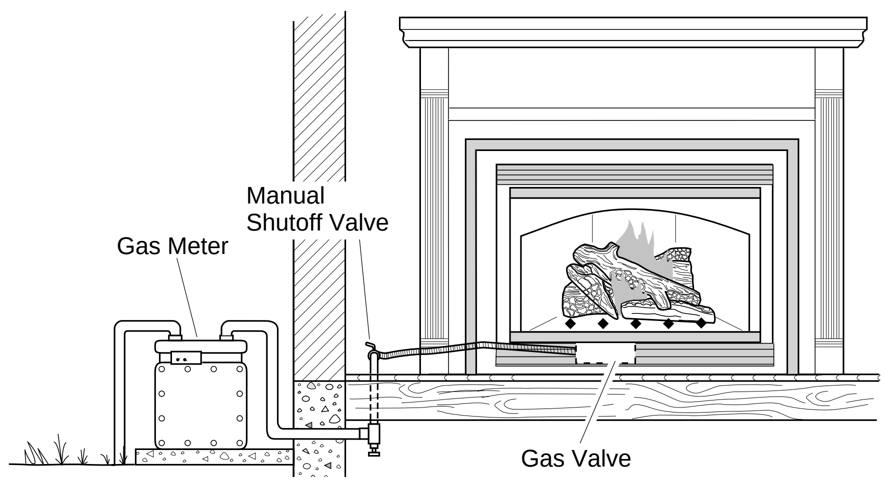


Figure 40 - Checking Gas Joints for Natural Gas Fireplace

FIREPLACE INSTALLATION
Continued

INSTALLING OPTIONAL WALL MOUNTED THERMOSTAT - GWMT1

⚠ WARNING: Installation must be done by a qualified installer familiar with low voltage wiring procedures.

⚠ WARNING: Do not connect this thermostat to any electrical source! Electrical shock and/or fire hazard will occur.

1. Open lower louver panel. The valve is attached to the underside of the firebox assembly.
2. Disconnect from the valve the wires running from the ON/OFF switch.
3. Connect one terminal of 25 ft. wire for the wall thermostat to the TPTH terminal on the valve. Connect remaining wire terminal to the TH terminal on the valve. Make sure that the wire terminals are in the positions on the unit as pictured in Figure 41. If wires are not connected as shown the thermostat will not work.
4. Route the 25 ft. wire through openings provided on the sides of the fireplace to a convenient location to mount your thermostat (no outside wall).
   IMPORTANT: The wire may be shortened but must not be lengthened.

   The thermostat should be mounted 54" above the floor in a location where there is good air circulation. Avoid heat sources such as lamps, direct sunlight, fireplace, or heat and air conditioning ducts.
5. Gently remove the cover of the thermostat from the base. Grasp the sides of the cover firmly and pull to separate from the base.
6. Feed the electrical wires through the rectangular slots (from the back) on each side of the base (see Figure 42).

⚠ WARNING: Do not connect this thermostat to a power source. Electrical shock and/or fire hazard will occur.

7. Connect one bare wire end to each terminal ("W" and "R") of the thermostat base (see Figure 43).
8. Install the base to the wall with screws provided with thermostat.
9. Move the temperature adjustment back and forth to insure the bi-metal is free from restrictions.
10. Replace the cover onto the base. (Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.)
11. Set the temperature adjustment to the desired setting.

    This thermostat has been electronically calibrated at the factory. No adjustment or leveling is necessary.

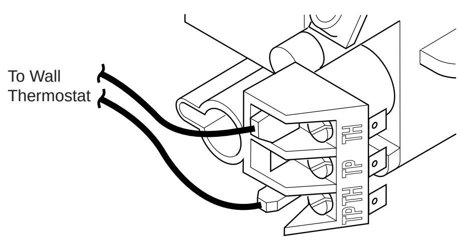


Figure 41 - Control Valve Terminals

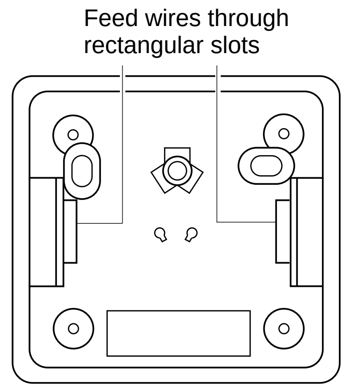


Figure 42 - Back View of Thermostat Base

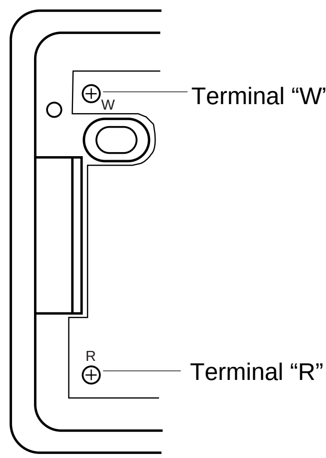


Figure 43 - Thermostat Base Terminals "W" and "R"

Continued

FIREPLACE INSTALLATION
Continued

REMOVING/REPLACING GLASS DOOR

You must remove glass door to install optional brick liners, logs, lava rock, and ember material.

> ⚠ **CAUTION: Do not operate this fireplace with a broken glass door panel or without the glass door panel securely in place. For replacement part information see *Replacement Parts*, page 33.**

1. Remove the upper louver panel by lifting upward and out (see Figure 44).
2. Remove the screws from the three tabs at the top of the glass door while holding door securely keeping it from falling forward.
3. Grasp door by both sides and ease it upward off of the lower bracket (see Figure 45).
4. To replace glass door, follow the above instructions in reverse.

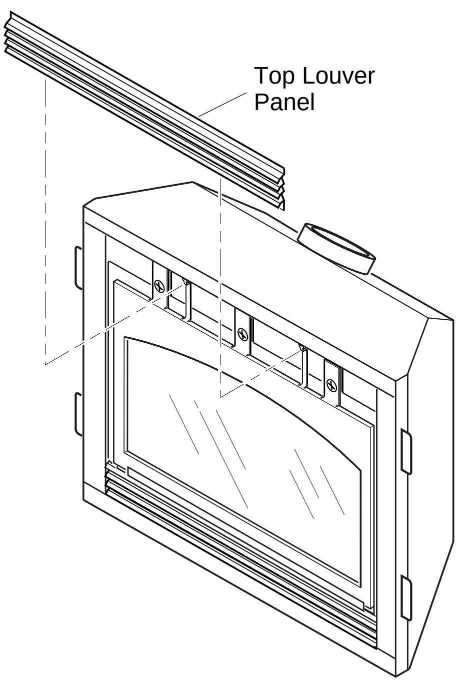


Figure 44 - Removing Top Louver Panel

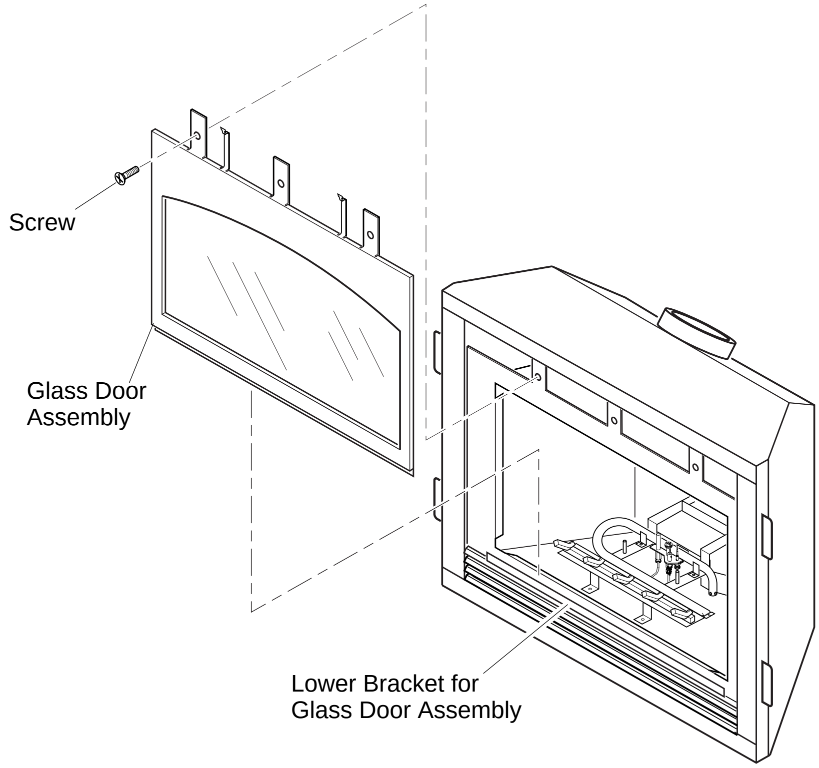


Figure 45 - Removing/Replacing Glass Door

Attaching Magnetic Decorative Brass Strips - HDV Only

The HDV fireplaces come with a set of two magnetic decorative brass strips. Before attaching strips to fireplace, remove plastic film from brass pieces. After installing door, attach these strips to the top and bottom of glass door frame.

FIREPLACE INSTALLATION

Continued

INSTALLING OPTIONAL BRICK LINER D8037/D8041

⚠ WARNING: If fireplace has been running, turn off and unplug fireplace. Let cool before installing brick liner.

This brick liner kit is optional. You may purchase brick liner from your local dealer or see *Accessories*, page 35.

⚠ CAUTION: Always handle brick panels with two hands. Do not force brick panels into place. Excessive force will break brick panels.

1. Remove glass door. See *Removing/Replacing Glass Door*, page 22.
2. If installing brick liner in new fireplace, go to step 3. If installing brick liner in an existing fireplace, carefully remove logs, lava rock, and ember material.
3. Install rear brick panel first. Rest bottom edge of panel on back edge of grate (see Figure 46).
4. Loosely secure retainer brackets to grate. Brackets are adjustable left to right to allow proper placement of panel. These will hold rear panel in place while installing side panels.
5. Install left side brick panel by sliding it between the grate and the side of the firebox (see Figure 47).
6. Slide the left retainer bracket against the left side brick panel. Tighten the bracket screw. This secures both the left side and rear brick panels.
7. Install the right brick panel using the same method described in step 3.
8. Slide the right retainer bracket against the right side brick panel. Tighten the bracket screw. This secures both the right side and rear brick panels.
9. Follow instructions on page 24 to install logs, lava rock, and ember material.
10. Replace glass door (see page 22).

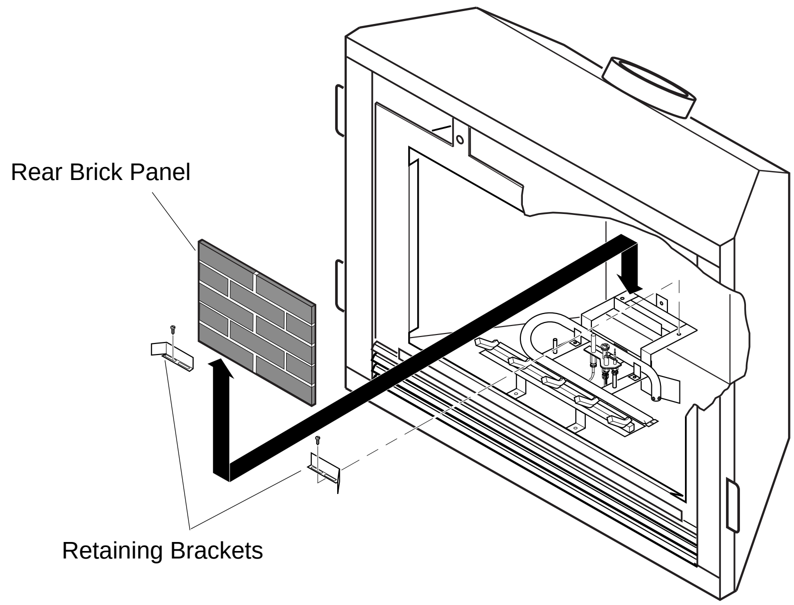


Figure 46 - Installing Rear Brick Panel and Retainer Brackets

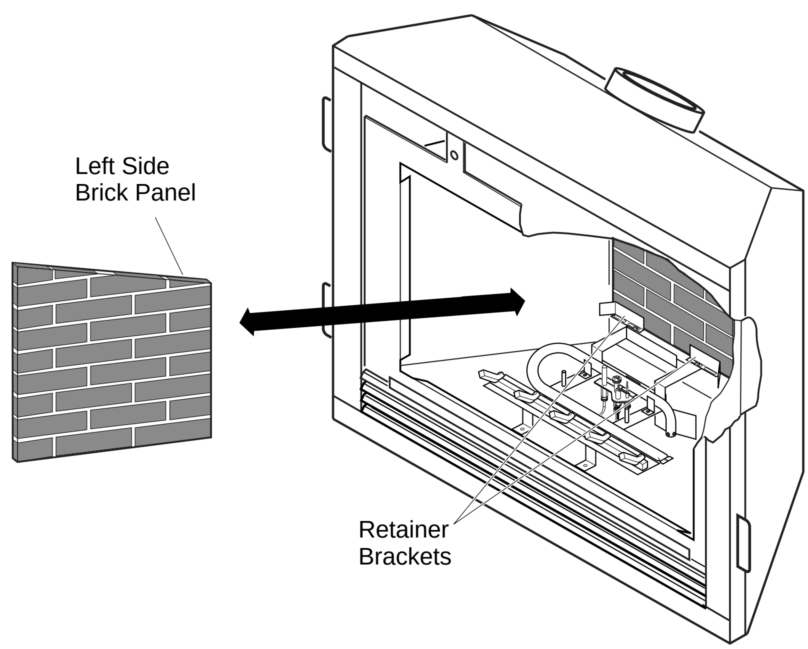


Figure 47 - Installing Left Side Brick Panel

Continued

FIREPLACE INSTALLATION

Continued

INSTALLING LOGS, LAVA ROCK AND GLOWING EMBERS

⚠ WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with fireplace.

Remove glass door. See *Removing/Replacing Glass Door*, page 22. Install logs according to instructions for fireplace model numbers.

Fireplace Models BHDV37N/P and BHDV41N/P

1. Place log #1 (back log) on top of grate. Make sure the notches in the bottom of the log fit over the grate (see Figure 48).
2. Rest log #2 (large front log) on the pins on the front part of the grate (see Figure 49).
3. Place log #3 (crossover log) onto the rear and front logs. Make sure it is seated properly into the notch on the front log and over the raised triangular portion of the rear log as shown in Figure 50.
4. Place log #4 (small log) onto the front left part of the grate making sure the notches fits over the prong of the grate (and hole over pin on 41" set). See Figure 51.
5. Place lava rock along sides and front of firebox bottom in areas that are visible only. It is not necessary to use all of the lava rock provided.

NOTICE: Do not put lava rock on burner or under burner. Placing lava rock on burner could cause performance problems.

6. Pull ember material apart into pieces no larger than a dime. Place these pieces loosely and sparingly directly onto the exposed section of the front burner and along the space between the burner and grate prongs (see Figure 52). This will create the glowing ember appearance as the flame touches the ember material. Do not block air slots by using too much ember material in one area. It is not necessary to use all of the ember material provided.
7. Replace the glass door. See *Removing/Replacing Glass Door*, page 22.

⚠ WARNING: The glass door must be securely in place before running this fireplace. Do not run this fireplace if glass is missing or broken.

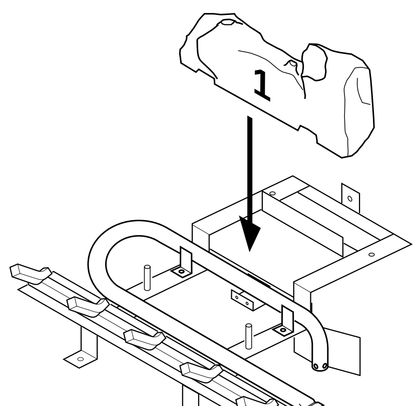


Figure 48 - Installing Log No. 1

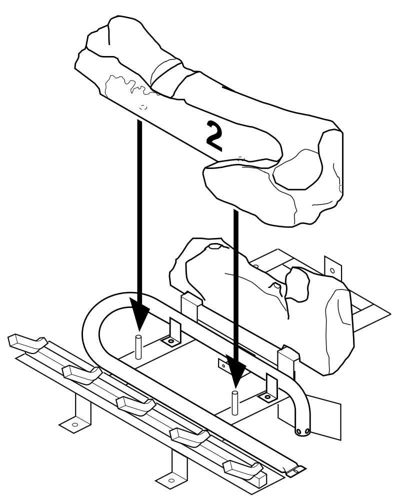


Figure 49 - Installing Log No. 2

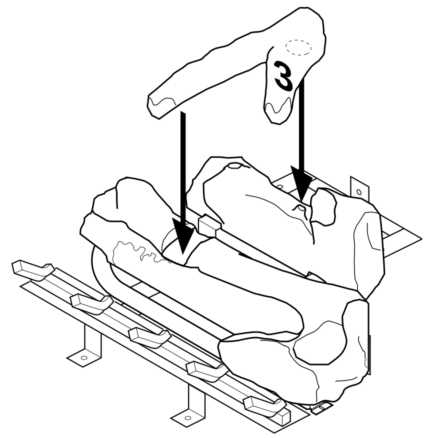


Figure 50 - Installing Log No. 3

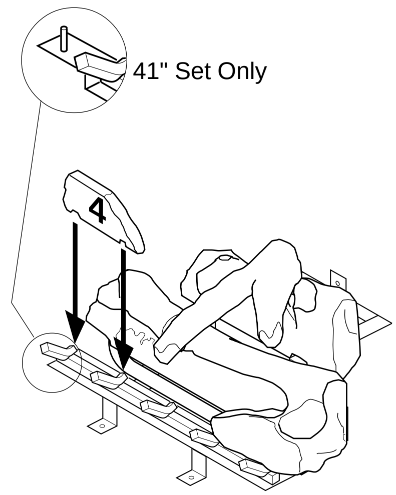


Figure 51 - Installing Log No. 4

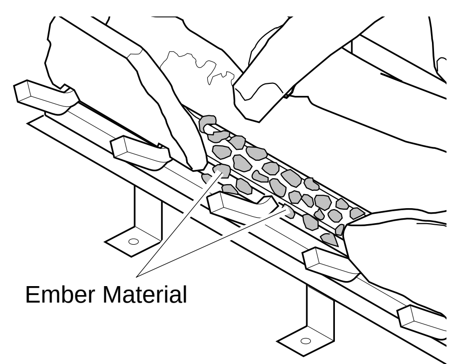


Figure 52 - Placing Ember Material on Burner

FIREPLACE INSTALLATION
Continued

Fireplace Models HDV37N/P and HDV41N/P

1. Place log#1 (back log) on grate. Make sure the lower middle section of the log fits securely into the open area in back of grate (see Figure 53).
2. Place log #2 (two log assembly) onto pins on left front and middle section of the front burner (see Figure 54).
3. Place log #3 (crossover assembly) onto the front right pin on front burner with the crossover log resting in notch on back log (see Figure 55).
4. Place lava rock along sides and front of firebox bottom.

NOTICE: Do not put lava rock on burner or under burner. Placing lava rock on burner could cause performance problems.

It is not necessary to use all of the lava rock provided.

5. Pull ember material apart into pieces no larger than a dime. Place these pieces loosely onto the exposed section of the front burner and space between logs 2 and 3 where front burner is exposed (see Figure 56). This will create the glowing appearance as the flame touches the ember material. Do not block ports by using too much ember material in one area. It is not necessary to use all of the ember material provided.
7. Replace the glass door. See *Removing/ Replacing Glass Door*, page 22.

WARNING: The glass door must be securely in place before running this fireplace. Do not run this fireplace if glass is missing or broken.

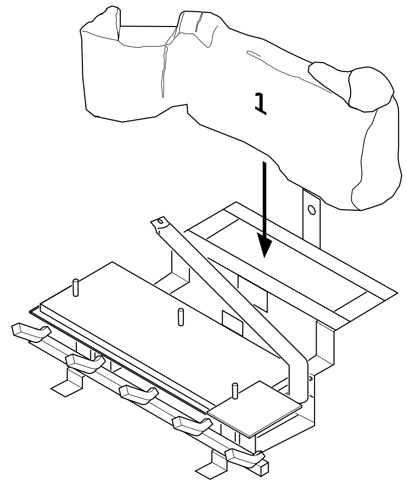


Figure 53 - Installing Log No. 1

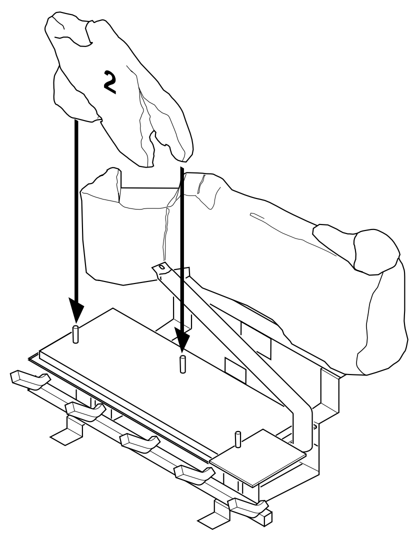


Figure 54 - Installing Log Assembly No. 2

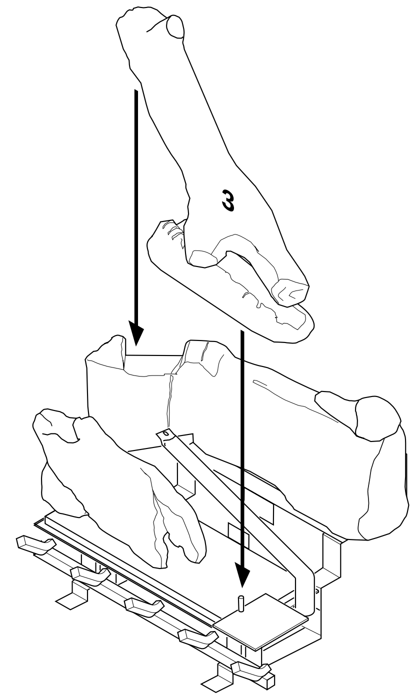


Figure 55- Installing Log Assembly No. 3

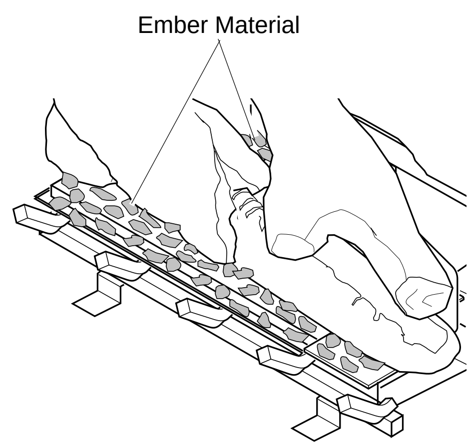


Figure 56 - Placing Ember Material on Burner

OPERATING FIREPLACE

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information in column one.
2. Open lower louver panel.
3. Turn ON/OFF switch to "OFF".
4. Turn off all electric power to the fireplace.
5. Push in gas control knob slightly and turn clockwise to "OFF".
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information in column one. If you don't smell gas, go to the next step.
7. The pilot is located by the main burner and should not require accessing for lighting.
8. Turn gas control knob counterclockwise to "PILOT".
9. Push in gas control knob all the way and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold for about one (1) minute after the pilot is lit. Release gas control knob and it will pop back. Pilot should remain lit. If it goes out, repeat steps 5 through 8.
   - If gas control knob does not pop up when relea sed, stop and immediately call your service technician or gas supplier.
   - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise to "ON".
11. Turn on all electric power to the fireplace.
12. Turn the ON/OFF switch to ON position.
13. This valve is equipped with a HI/LO feature. Set fireplace input as desired.
14. Close lower louver panel.

TO TURN OFF GAS TO APPLIANCE

1. Open lower louver panel.

2a. Turn ON/OFF switch to "OFF".

2b. **If Using Optional Hand-Held Remote:** Set selector switch in the OFF position to prevent draining battery.

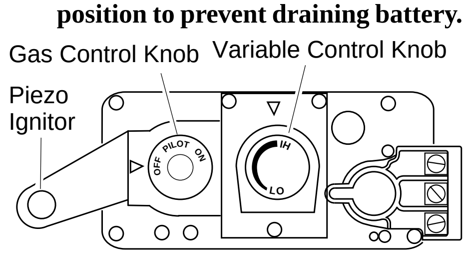


Figure 57 - Control Valve

3. Turn off all electrical power to the appliance if service is to be performed.
4. Push in gas control knob slightly and turn clockwise to "OFF".
5. Close lower louver panel.

Shutting Off Burner(s) Only (pilot stays lit)

You may shut off the burner(s) and keep the pilot lit by doing one of the following:

1. Turn gas control knob clockwise to the PILOT position.
2. Move the wall switch to the OFF position.
3. Set selector switch in the OFF position.

MANUAL LIGHTING PROCEDURE

1. Remove glass door (see *Removing/Replacing Glass Door*, page 22).
2. Follow steps 1 through 8 under *Lighting Instructions*.
3. Depress gas control knob and light pilot with match.
4. Keep gas control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release gas control knob. Now follow steps 10 through 14, column 2.
5. Replace glass door (see *Removing/Replacing Glass Door*, page 22).

OPTIONAL REMOTE OPERATION

Note: All remote control accessories must be purchased separately (See *Accessories* on page 35). Follow instructions included with the remote control.

Thermostat Control Operation

(Optional GHRCT Only) The thermostat control setting on the remote control unit can be set to any comfort level between HI and LO. The burner(s) will turn on and off automatically to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions*.

OPERATING FIREPLACE

Continued

1. **After lighting, let pilot flame burn for about one minute. Turn gas control knob on the control valve to ON position. Turn variable control knob anywhere between HI and LO. Slide the selector switch to the REMOTE position. *Note:* The burner(s) may light if hand-held remote ON button was on when selector switch was last turned off. You can now turn the burner(s) on and off with either optional hand-held remote control unit.**

   IMPORTANT: **Do not leave the selector switch in the REMOTE position when the pilot is not lit. This will drain the battery.**

   IMPORTANT: **Be sure to press the ON/OFF buttons on the hand-held remote control unit for up to 3 seconds to assure proper operation.**

GHRC Series Operation:

2a. **Press the ON/OFF button to turn the burner(s) on and off. When turning burner(s) off, the pilot will remain lit.**

GHRCT Series Operation:

2b. **Select the MAN (manual) or AUTO button on the hand-held remote control unit (see Figure 59).**
- **In manual mode, turn burner(s) on or off by pressing the ON or OFF buttons on the hand-held remote control unit.**
- **In auto mode, the room temperature is controlled by the thermostat in the hand-held remote control unit. To increase the room temperature, press the top arrow of the TEMP button. To lower the room temperature, press the bottom arrow of the TEMP button. At higher settings the heater will run more. *IMPORTANT:* This remote control has been specially engineered to take an air temperature sample every 5.5 minutes in the auto mode. It will not respond immediately to the temperature setting being turned up or down.**

IMPORTANT: **The hand-held remote control unit must be near the heater but not extremely close to it. The thermostat on the hand-held remote control unit will heat up too quickly and turn the heater off.**

3. **Use the STATUS button on the hand-held remote control unit to see the operation mode being used and the temperature setting selected. A red light will come on beside the operation mode being used.**
4. **To turn the burner(s) off when operating in the manual mode, press the OFF button. If operating in the auto mode, press the MAN button, then press the OFF button. The pilot will remain lit. *IMPORTANT:* To turn the pilot off, manually turn the gas control knob on the heater to the OFF position or set selector switch to OFF position.**

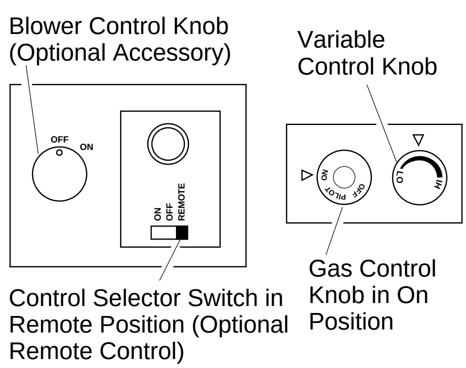


Figure 58 - Setting the Selector Switch, Gas Control Knob, and Variable Control Knob for Remote Operation

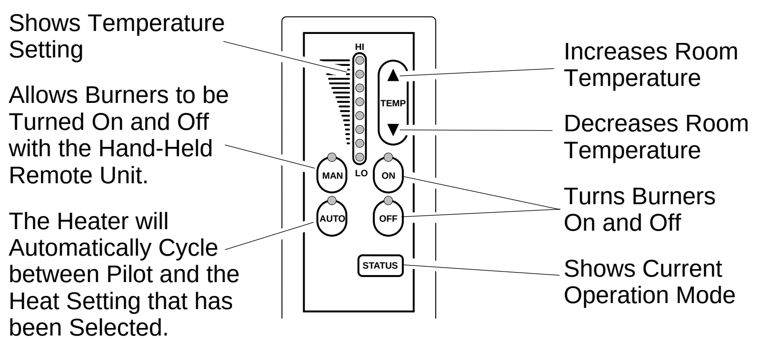


Figure 59 - Hand-Held Thermostat Remote Control Unit Selections (GHRCT Only)

OPERATING OPTIONAL BLOWER ACCESSORY

Locate the blower controls by opening the lower louver panel on the fireplace. Blower controls are located on the left side of the switch bracket to the left just inside the louver panel.

Both the GA3700 manual blower and the DA3610T thermostatically-controlled blower have an ON setting and an OFF setting. The blower will only run when the switch is in the ON position. In the OFF position, the blower will not operate.

Note for DA3610T Only: **If you are using DA3610T blower with optional thermostat (wall mount or remote control) for the fireplace, your fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.**

The blower helps distribute heated air from the fireplace. Periodically check the louvers of the firebox and remove any dust, dirt, or other obstructions that will hinder the flow of air.

Continued

OPERATING FIREPLACE

Continued

OPERATING OPTIONAL GWMT1 WALL MOUNTED THERMOSTAT

WARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.

Light the fireplace as instructed in *Lighting Instructions* on page 26. Set wall thermostat to desired temperature.

This thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation.

To turn the fireplace off, adjust thermostat to the lowest setting and turn the gas control knob back to PILOT. The pilot will remain lit.

***IMPORTANT:* To turn the pilot off, turn the gas control knob on the heater to the OFF position.**

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. Call a qualified service person to readjust the pilot if necessary.

The height of the thermopile must be 3/8" to 1/2" above the pilot flame as shown in Figure 60. The thermocouple must be at a height of about 1/8" above the pilot flame. The flame from the pilot burner must extend beyond both the thermocouple and thermopile.

If your pilot assembly does not meet these requirements:

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 26)
- see *Troubleshooting*, pages 30 through 32

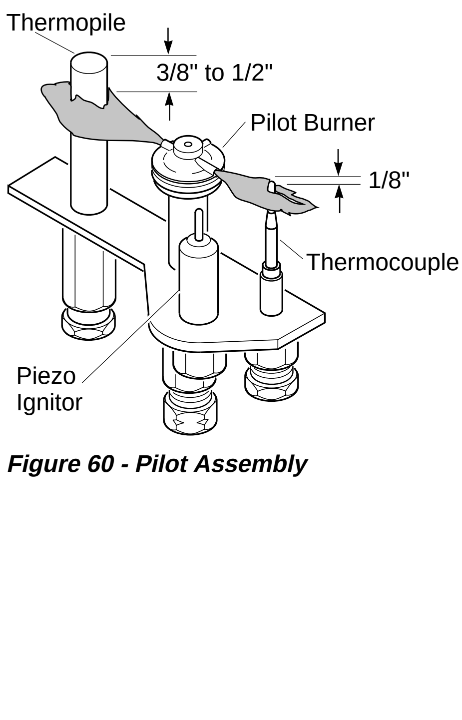


Figure 60 - Pilot Assembly

BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flame patterns will be different from unit to unit and will vary depending on installation type and weather conditions.

If the vent configuration is installed incorrectly, the flames will lift or "ghost". This can be dangerous. Inspect the flames after installation to ensure proper installation and performance.

Figure 61 shows a typical flame pattern for HDV37N, HDV37P, HDV41N, and HDV41P models. Figure 62 shows a typical flame pattern for BHDV37N, BHDV37P, BHDV41N, and BHDV41P.

If burner flame pattern differs from that described:

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 26)
- see *Troubleshooting*, pages 30 through 32

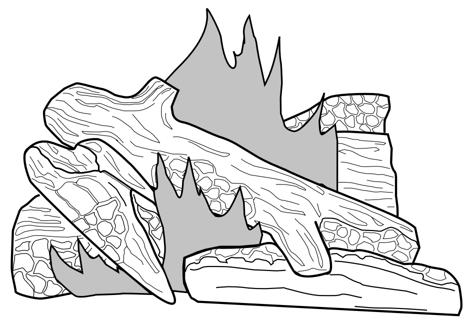


Figure 61 - Typical Flame Pattern for HDV37N/P and HDV41N/P

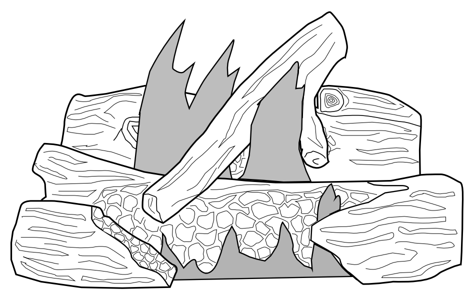


Figure 62 - Typical Flame Pattern for BHDV37N/P and BHDV41N/P

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off fireplace and let cool before cleaning.

⚠ CAUTION: You must keep control areas, burners, and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

GLASS DOOR

⚠ WARNING: Handle glass door panel with care. Do not strike, slam, or otherwise abuse glass. Do not operate fireplace with the glass door removed, cracked, or broken.

⚠ WARNING: Do not use abrasive cleaners as this may damage glass. Use a non-abrasive household glass cleaner to clean glass. Do not clean glass when hot.

Glass must be cleaned periodically. During start-up it is normal for condensation to form on the inside of the glass causing lint, dust, and other airborne particles to cling to the glass surface. During initial start-up a slight film may form on the glass due to paint curing. The glass should be cleaned several times with a non-amonia, non-abrasive household cleaner and warm water after the first two weeks of operation. Thereafter, clean the glass two or three times during each heating season, depending on the usage and circumstances present. Refer to *Removing/Replacing Glass Door* on page 22 of this manual when removing glass door for cleaning.

⚠ WARNING: Only parts supplied by the manufacturer should be used when replacing broken or damaged glass door panel (see *Replacement Parts*, page 33). This glass door panel is a complete unit. No substitute materials may be used.

⚠ CAUTION: Wear gloves and safety glasses while handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass.

If glass has been broken, carefully remove glass door (see *Removing/Replacing Glass Door,* page 22). Vacuum all glass pieces with a shop vac.

⚠ CAUTION: Do not vacuum if pieces are hot.

Use only the ceramic glass door replacement intended for this fireplace (see *Replacement Parts,* page 33 for detail on ordering). No substitutions may be made. See *Removing/Replacing Glass Door,* page 22 for instructions for replacing glass door.

⚠ WARNING: Do not operate fireplace with the glass door removed, cracked, or broken.

PILOT AND BURNERS

- Remove ember material before cleaning burners and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt, or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt, or lint.

LOGS

- If you remove logs for cleaning, refer to *Installing Logs, Lava Rock, and Glowing Embers*, pages 24 and 25, to properly replace logs.
- Use a vacuum cleaner to remove any carbon build-up on logs.
- Replace log(s) if broken. See *Replacement Parts* on page 33.
- Replace ember material periodically as needed. See *Replacement Parts* on page 33.

VENTING SYSTEM

Conduct annual inspection of the venting system following these guidelines:

1. Check areas of venting system that are exposed to the weather for corrosion (rust spots or streaks and, in extreme cases, holes). Have these items replaced immediately by a qualified service person.
2. Remove the vent cap and shine a flashlight into the vent. Remove any foreign material.
3. Check for evidence of excessive condensation. Continuous condensation can cause corrosion of caps, pipes, and fittings and can be caused by having excessive lateral runs, too many elbows, or exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe section or fitting has been disturbed and loosened. Check mechanical supports such as wall straps for rigidity.

TROUBLESHOOTING

Note: For additional help, visit DESA International's technical service web site at **www.desatech.com**.

Note: All troubleshooting items are listed in order of operation.

⚠ WARNING: Turn off heater and let cool before servicing. Only a qualified service person should service and repair heater.

⚠ CAUTION: Never use a wire, needle, or similar object to clean pilot. This can damage pilot unit.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at pilot	1. Ignitor electrode not connected to ignitor cable	1. Reconnect ignitor cable
	2. Ignitor cable pinched or wet	2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	3. Piezo ignitor nut is loose	3. Tighten nut holding piezo ignitor. Nut is located behind the mounting bracket
	4. Broken ignitor cable	4. Replace ignitor cable
	5. Bad piezo ignitor	5. Replace piezo ignitor
	6. Ignitor electrode broken	6. Replace pilot assembly
	7. Ignitor electrode positioned wrong	7. Replace pilot assembly
When ignitor button is pressed, there is spark at pilot but no ignition	1. Gas supply turned off or manual shutoff valve closed	1. Turn on gas supply or open manual shutoff valve
	2. Gas control knob not in PILOT position	2. Turn gas control knob to PILOT position
	3. Gas control knob not pressed in while in PILOT position	3. Press in gas control knob while in PILOT position
	4. Air in gas lines when installed	4. Continue holding down gas control knob. Repeat igniting operation until air is removed
	5. Depleted gas supply (propane/LP models only)	5. Contact local propane/LP gas company
	6. Pilot is clogged	6. Clean pilot (see *Cleaning and Maintenance*, page 29) or replace pilot assembly
	7. Gas regulator setting is not correct	7. Replace gas control
Pilot lights but flame goes out when control knob is released	1. Gas control knob not fully pressed in	1. Press in gas control knob fully
	2. Gas control knob not pressed in long enough	2. After pilot lights, keep gas control knob pressed in 30 seconds
	3. Manual shutoff valve not fully open	3. Fully open manual shut-off valve
	4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged pilot	4. A) Contact local gas company B) Clean pilot (see *Cleaning and Maintenance*, page 29) or replace pilot assembly
	5. Thermocouple connection loose at control valve	5. Hand tighten until snug, then tighten 1/4 turn more
	6. Thermocouple damaged	6. Replace thermocouple
	7. Control valve damaged	7. Replace control valve

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Burner does not light after pilot is lit	1. Burner orifice clogged	1. Clean burner (see *Cleaning and Maintenance*, page 29) or replace burner orifice
	2. Inlet gas pressure is too low	2. Contact local propane/LP or natural gas company
	3. Thermopile leads disconnected or improperly connected	3. Reconnect leads (see *Wiring Diagram*, page 32)
	4. Thermopile is defective	4. Replace thermopile
Delayed ignition burner	1. Manifold pressure is too low	1. Contact local propane/LP or natural gas company
	2. Burner porting or orifice clogged	2. Clean burner (see *Cleaning and Maintenance*, page 29) or replace burner orifice
Burner backfiring during combustion	1. Burner orifice is clogged or damaged	1. Clean burner (see *Cleaning and Maintenance*, page 29) or replace burner orifice
	2. Damaged burner	2. Replace damaged burner
	3. Gas regulator defective	3. Replace gas control
Slight smoke or odor during initial operation	1. Residues from manufacturing processes and logs curing	1. Problem will stop after a few hours of operation
Heater produces a whistling noise when burner is lit	1. Turning gas control knob to HI position when burner is cold	1. Turn gas control knob to LO position and let warm up for a minute
	2. Air in gas line	2. Operate burner until air is removed from line. Have gas line checked by local propane/LP or natural gas company
	3. Dirty or partially clogged burner orifice	3. Clean burner (see *Cleaning and Maintenance*, page 29) or replace burner orifice
Glass soots	1. Flame impingement on logs	1. Adjust the log set so that the flame does not excessively impinge on it
	2. Debris around burner air mixer	2. Inspect the opening at the base of the burner to see that it is NOT packed with any type of material
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common. If noise is excessive, contact qualified service person
Remote does not function	1. Battery is not installed or battery power is low	1. Replace 9-volt batteries in receiver and remote control

Continued

TROUBLESHOOTING
Continued

⚠ WARNING: If you smell gas
- **Shut off gas supply.**
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

IMPORTANT: Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	1. Gas leak. **See Warning statement above**	1. Locate and correct all leaks (see *Checking Gas Connections*, page 19)
Fireplace shuts off in use	1. High or gusting winds	1. Fireplace has been tested for up to 40mph winds. However, extreme conditions may occur. See *Lighting Instructions* on page 26
	2. Low line pressure	2. Contact local propane/LP or natural gas company
	3. Pilot is partially clogged	3. Clean pilot (see *Cleaning and Maintenance*, page 29)
	4. Inner vent pipe leaking exhaust gasses into system	4. Locate and correct all leaks (see *Checking Gas Connections*, page 19)
	5. Horizontal vent improperly pitched	5. Horizontal vent termination should slope down only enough to prevent any water from entering the unit. The maximum downward slope of the vent termination is 1/4" for any horizontal run
	6. Glass too loose and air tight gasket leaks in corners after usage	6. Tighten glass
	7. Bad thermopile or thermocouple	7. Replace faulty component
	8. Improper vent cap installation	8. Check for proper installation and freedom from debris or blockage
Gas odor even when control knob is in OFF position	1. Gas leak. **See Warning statement above**	1. Locate and correct all leaks (see *Checking Gas Connections*, page 19)
	2. Control valve defective	2. Replace control valve
Gas odor during combustion	1. Gas leak. **See Warning statement above**	1. Locate and correct all leaks (see *Checking Gas Connections*, page 19)
Dark residue on logs or inside of fireplace	1. Improper log placement	1. Properly locate logs (see *Installing Logs, Lava Rock, and Glowing Embers*, page 24)
	2. Air holes at burner inlet blocked	2. Clean out air holes at burner inlets. Periodically repeat as needed
	3. Burner flame holes blocked	3. Remove blockage or replace burner

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can not supply original replacement part(s), call DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

When calling DESA International, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

Usually, we will ask you to return the defective part to the factory.

PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can not supply original replacement part(s), call DESA International's Parts Department at 1-800-972-7879 for referral information.

When calling DESA International, have ready

- model number of your fireplace
- the replacement part number

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

You can also visit DESA International's technical service web site at **www.desatech.com**.

WIRING DIAGRAM

⚠ CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

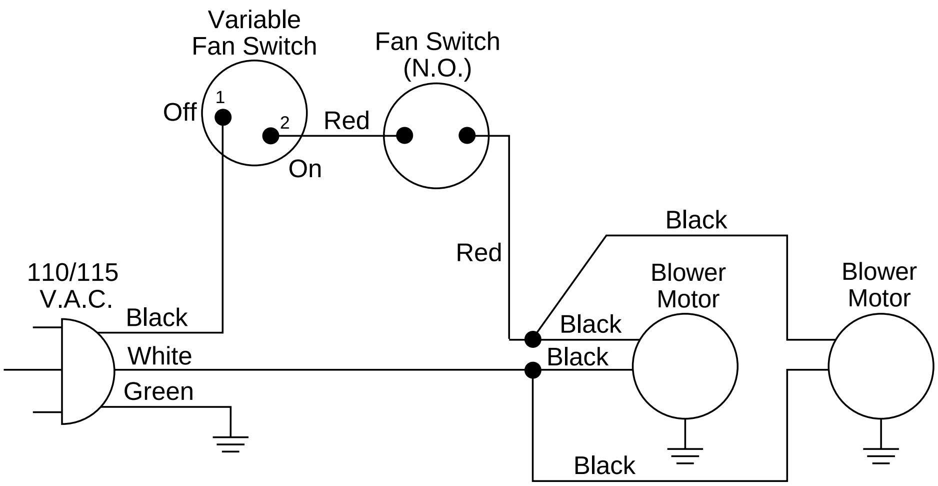


Figure 63 - Blower Wiring Diagram for Thermostat-Controlled Models

SERVICE HINTS

When Gas Pressure Is Too Low:

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply might be low (propane/LP units only)

When Gas Quality Is Bad:

- pilot will not stay lit
- burners will produce flames and soot
- fireplace will backfire when lit

If you feel your gas pressure is too low or gas quality is bad, contact your local natural or propane/LP gas supplier.

SPECIFICATIONS

	BHDV/HDV37N	BHDV/HDV37P	BHDV/HDV41N	BHDV/HDV41P
	17,000/24,000 Btu/h	17,000/22,000 Btu/h	18,000/26,000 Btu/h	19,000/24,000 Btu/h
Gas Type	Natural	Propane/LP	Natural	Propane/LP
Ignition	Piezo	Piezo	Piezo	Piezo
Manifold Pressure	3.5" w.c.	10.0" w.c.	3.5" w.c.	10.0" w.c.
Minimum Inlet Supply Pressure	4.5" w.c.	11.0" w.c.	4.5" w.c.	11.0" w.c.
Thermal Efficiency	70%	70%	70%	70%
Dimension, Inches/mm (HxWxD) Fireplace Carton	 33" x 37" x 18 1/2" 838 x 940 x 470mm 37" x 43" x 21" 940 x 1092 x 533mm	 33" x 37" x 18 1/2" 838 x 940 x 470mm 37" x 43" x 21" 940 x 1092 x 533mm	 33" x 41" x 18 1/2" 838 x 1041 x 470mm 37" x 47" x 21" 940 x 1194 x 533mm	 33" x 41" x 18 1/2" 838 x 1041 x 470mm 37" x 47" x 21" 940 x 1194 x 533mm
Weight, lbs/kg Fireplace Shipping	 132 lbs/60 kg 135 lbs/61 kg	 132 lbs/60 kg 135 lbs/61 kg	 142 lbs/64 kg 145 lbs/66 kg	 142 lbs/64 kg 145 lbs/66 kg

ACCESSORIES

Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA International's Sales Department at 1-800-432-2382. for information. You can also write to the address listed on the back page of this manual.

BRASS PERIMETER TRIM KIT D9037(37")/D9041(41")
(Not Shown)

Optional three sided brass trim kit covers unfinished edges around fireplace. Provides a finished appearance with the class of brass.

BRASS LOUVER KIT D6037(37")/D6041(41")
(Not Shown)

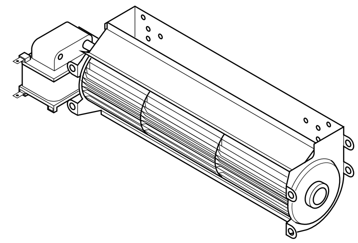
These louvers will give your fireplace an elegant look and allows you to customize your fireplace. They easily replace the standard black louvers by screwing into place.

DECORATIVE BRASS STRIP KIT D5037(37")/D5041(41") BHDV ONLY
(Not Shown)

These strips have a magnetic backing which makes installation and removal quick and easy. They are designed to go at the top and bottom of the glass door on BHDV units. *Note:* Remove the plastic film covering on strips before installing on fireplace.

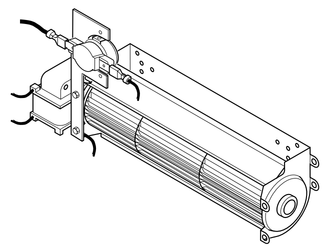
BRICK LINER D8037(37")/ D8041(41")
(Not Shown)

This brick liner adds a touch of style to your direct-vent fireplace and comes with easy to follow instructions for installation.



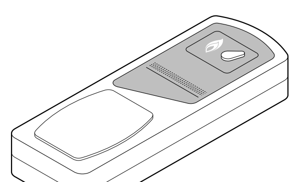
MANUAL BLOWER KIT GA3700

Manual variable control blower accessory for both the HDV and BHDV Series fireplaces.



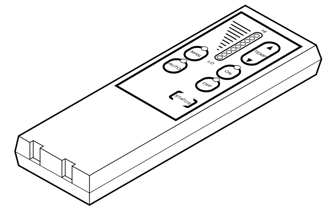
THERMOSTATICALLY-CONTROLLED BLOWER KIT DA3610T

Provides better heat distribution. Blower turns off and on automatically, as needed. Complete installation and operation instructions included in this manual.



RECEIVER AND HAND-HELD REMOTE CONTROL KIT GHRC

For all models. Allows the heater to be turned on and off conveniently.

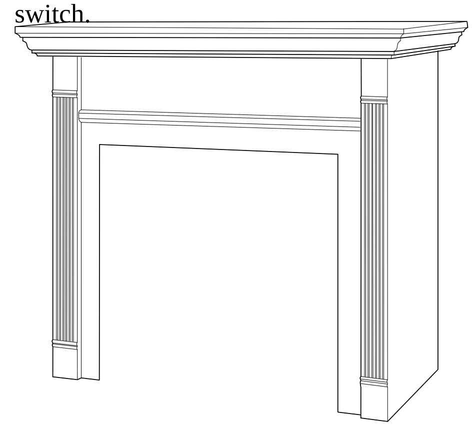


RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - GHRCT

Allows the fireplace to be operated in a manually or thermostatically-controlled mode. You can adjust your heat settings and turn the heater on or off without leaving the comfort of your easy chair. (Requires part no. 103284-04 wire harness included with fireplace.)

WALL MOUNTED THERMOSTAT CONTROL KIT GWMT1
(Not Shown)

Allows easy wall access to the operation of your fireplace. This will allow you thermostatic control with the convenience of a wall switch.



CABINET MANTEL WITH SQUARE LEG STYLING UNFINISHED GM501U(37")/ GM503U(41")

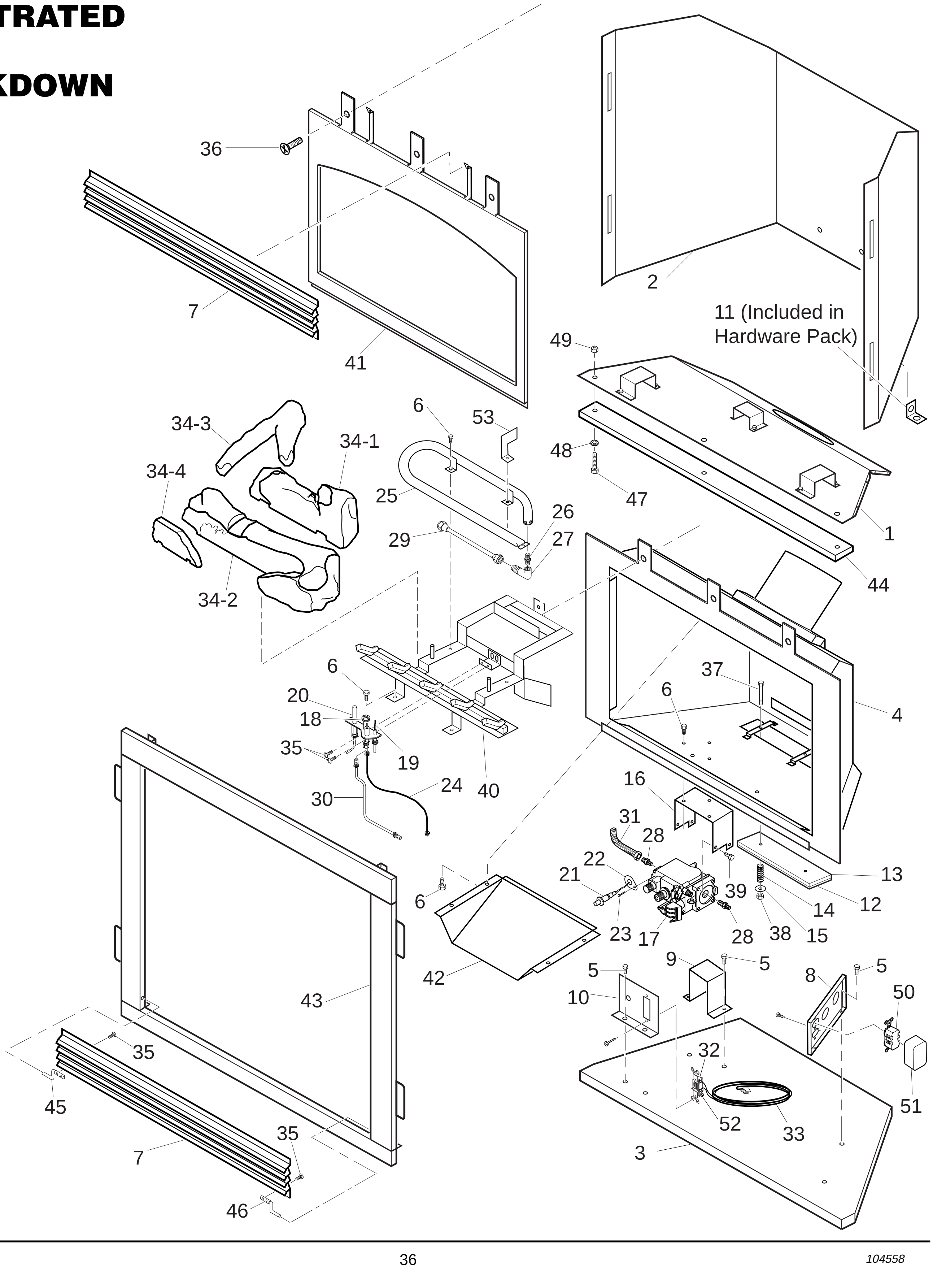
For use with all models. This birch-veneer mantel is unfinished and ready to stain or paint. Complete assembly instructions are included along with a three-sided brass trim kit.

VANGUARD® **(B)HDV37N/P AND (B)HDV41N/P**

DIRECT-VENT FIREPLACE (NATURAL/PROPANE/LP)

ILLUSTRATED PARTS BREAKDOWN

BHDV37N
BHDV41N



104558

PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 33 of this manual.

DIRECT-VENT FIREPLACE

BHDV37N
BHDV41N

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104547-02	Top Outer Casing - 37"	1
	104547-01	Top Outer Casing - 41"	1
2	104474-02	Outer Casing - 37"	1
	104474-01	Outer Casing - 41"	1
3	104548-02	Bottom Outer Casing - 37"	1
	104548-01	Bottom Outer Casing - 41"	1
4	104479-08BR	Firebox Assembly - 37"	1
	104479-07BR	Firebox Assembly - 41"	1
5	M11084-26	Screw, Hex	52
6	M11084-46	Screw, Hex	13
7	102455-04	Louver, Extruded - 37"	2
	102455-03	Louver, Extruded - 41"	2
8	104443-01	Firebox Support, Right	1
9	104486-01	Firebox Support, Left	1
10	104482-01	Switch Bracket	1
11	104483-01	Floor Mounting Bracket	2
12	104491-01	Relief Cover	1
13	104518-01	Relief Cover Gasket	1
14	104527-01	Relief Spring	2
15	104528-01	Relief Washer	2
16	104537-01	Valve Bracket	1
17	104496-01	SIT Valve, Natural	1
18	104497-01	SIT Pilot, Natural	1
19	104498-01	Thermocouple	1
20	104499-01	Thermopile	1
21	104500-01	Ignitor	1
22	104501-01	Ignitor Bracket	1
23	104502-01	Ignitor Screw	1
24	104503-01	Ignitor Wire	1
25	104504-01	Burner	1
26	104506-03	Orifice - 37"	1
	104506-13	Orifice - 41"	1
27	104507-01	Brass Elbow	1
28	104508-01	Brass Fitting	2
29	104509-01	Aluminum Tubing Assy	1
30	104510-01	Pilot Tubing Assy	1
31	101628-04	Flexible Connector	1
32	104514-01	Wall Switch	1
33	104515-01	Wire for Wall Switch	1

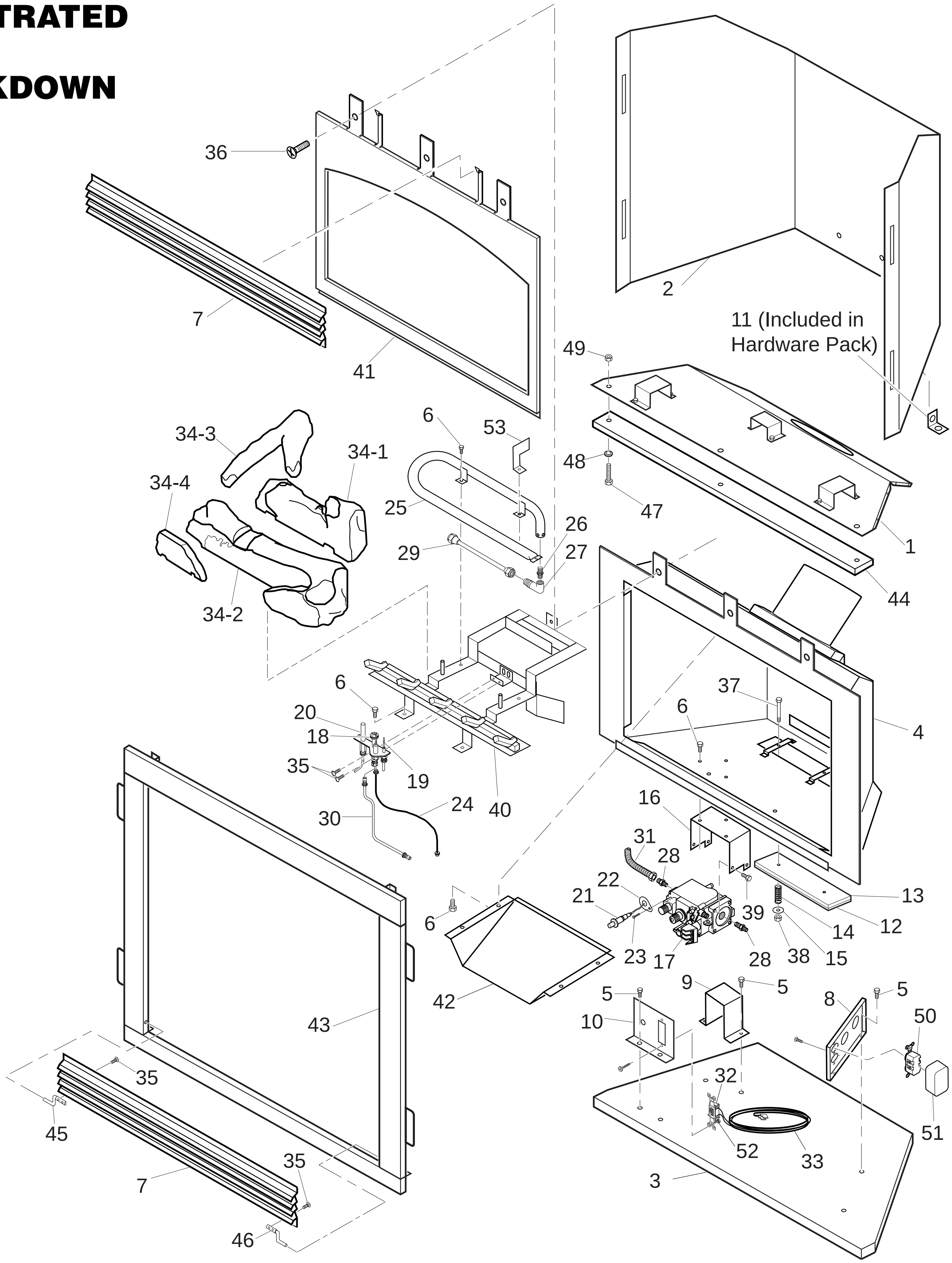
KEY NO.	PART NUMBER	DESCRIPTION	QTY.
34	104516-01	Log Set - 37"	1
	104561-01	Log Set - 41"	1
34-1	104876-02	Rear Log - 37"	1
	104876-01	Rear Log - 41"	1
34-2	104877-02	Front Log - 37"	1
	104877-01	Front Log - 41"	1
34-3	104878-02	Crossover Log - 37"	1
	104878-01	Crossover Log - 41"	1
34-4	104879-02	Log Piece - 37"	1
	104879-01	Log Piece - 41"	1
35	M10908-2	Screw	6
36	M12461-73	Screw	3
37	H5C4-20B	Bolt	2
38	NTC-4C	Locknut	2
39	M12461-26	Screw	4
40	104555-02CJ	Grate Assembly - 37"	1
	104555-01CJ	Grate Assembly - 41"	1
41	105775-04	Glass Door Assy - 37"	1
	105775-02	Glass Door Assy - 41"	1
42	104490-02CJ	Baffle - 37"	1
	104490-01CJ	Baffle - 41"	1
43	104576-02CK	Front Assembly - 37"	1
	104576-01CK	Front Assembly - 41"	
44	104615-02	Insulation - 37"	1
	104615-01	Insulation - 41"	1
45	104313-01	Hinge, Pin	1
46	104313-02	Hinge, Pin	1
47	104954-01	Screw	3
48	104963-01	Washer	3
49	104955-01	Nut	3
50	103769-01	Duplex Outlet	1
51	104602-01	Duplex Outlet Cover	1
52	NPC 1C	Nut	2
53	105325-01	Burner Baffle	1
PARTS AVAILABLE - NOT SHOWN			
	GA6060	Lava Rock	1
	104529-01	Ember Material	1
	104512-01	Ball Valve	1

VANGUARD® (B)HDV37N/P AND (B)HDV41N/P

DIRECT-VENT FIREPLACE (NATURAL/PROPANE/LP)

ILLUSTRATED PARTS BREAKDOWN

BHDV37P
BHDV41P



104558

PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 33 of this manual.

DIRECT-VENT FIREPLACE

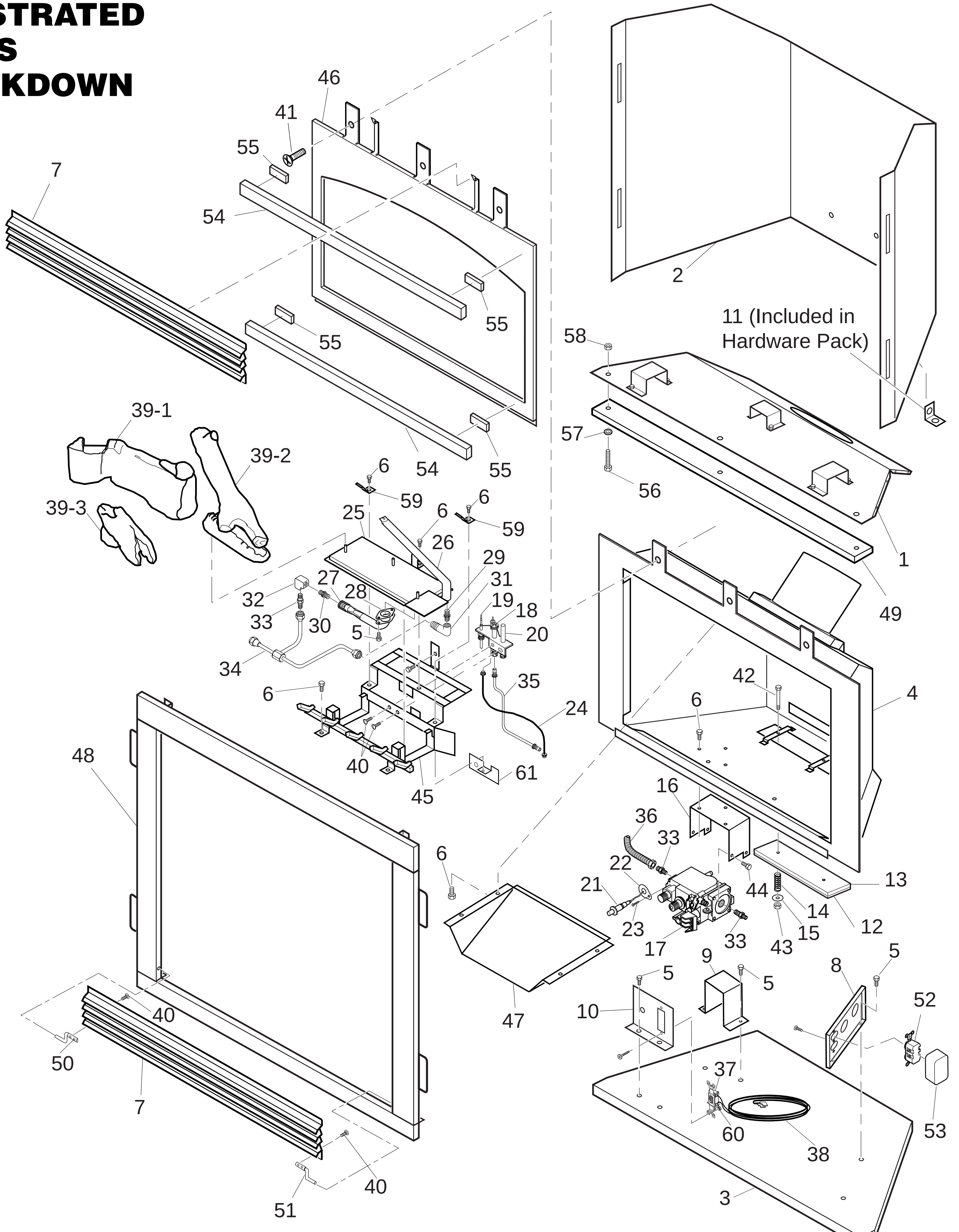
BHDV37P
BHDV41P

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104547-02	Top Outer Casing - 37"	1
	104547-01	Top Outer Casing - 41"	1
2	104474-02	Outer Casing - 37"	1
	104474-01	Outer Casing - 41"	1
3	104548-02	Bottom Outer Casing - 37"	1
	104548-01	Bottom Outer Casing - 41"	1
4	104479-08BR	Firebox Assembly - 37"	1
	104479-07BR	Firebox Assembly - 41"	1
5	M11084-26	Screw, Hex	52
6	M11084-46	Screw, Hex	13
7	102455-04	Louver, Extruded - 37"	2
	102455-03	Louver, Extruded - 41"	2
8	104443-01	Firebox Support, Right	1
9	104486-01	Firebox Support, Left	1
10	104482-01	Switch Bracket	1
11	104483-01	Floor Mounting Bracket	2
12	104491-01	Relief Cover	1
13	104518-01	Relief Cover Gasket	1
14	104527-01	Relief Spring	2
15	104528-01	Relief Washer	2
16	104537-01	Valve Bracket	1
17	104496-02	SIT Valve, Propane/LP	1
18	104497-02	SIT Pilot, Propane/LP	1
19	104498-01	Thermocouple	1
20	104499-01	Thermopile	1
21	104500-01	Piezo Ignitor	1
22	104501-01	Ignitor Bracket	1
23	104502-01	Ignitor Screw	1
24	104503-01	Ignitor Wire	1
25	104504-02	Burner	1
26	104506-04	Orifice - 37"	1
	104506-14	Orifice - 41"	1
27	104507-01	Brass Elbow	1
28	104508-01	Brass Fitting	2
29	104509-01	Aluminum Tubing Assy	1
30	104510-01	Pilot Tubing Assy	1
31	101628-04	Flexible Connector	1
32	104514-01	Wall Switch	1
33	104515-01	Wire for Wall Switch	1

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
34	104516-01	Log Set - 37"	1
	104561-01	Log Set - 41"	1
34-1	104876-02	Rear Log - 37"	1
	104876-01	Rear Log - 41"	1
34-2	104877-02	Front Log - 37"	1
	104877-01	Front Log - 41"	1
34-3	104878-02	Crossover Log - 37"	1
	104878-01	Crossover Log - 41"	1
34-4	104879-02	Log Piece - 37"	1
	104879-01	Log Piece - 41"	1
35	M10908-2	Screw	6
36	M12461-73	Screw	3
37	H5C4-20B	Bolt	2
38	NTC-4C	Locknut	2
39	M12461-26	Screw	4
40	104555-02CJ	Grate Assembly - 37"	1
	104555-01CJ	Grate Assembly - 41"	1
41	105775-04	Glass Door Assy - 37"	1
	105775-03	Glass Door Assy - 41"	1
42	104490-02CJ	Baffle - 37"	1
	104490-01CJ	Baffle - 41"	1
43	104576-02CK	Front Assembly - 37"	1
	104576-01CK	Front Assembly - 41"	1
44	104615-02	Insulation - 37"	1
	104615-01	Insulation - 41"	1
45	104313-01	Hinge, Pin	1
46	104313-02	Hinge, Pin	1
47	104954-01	Screw	3
48	104963-01	Washer	3
49	104955-01	Nut	3
50	103769-01	Duplex Outlet	1
51	104602-01	Duplex Outlet Cover	1
52	NPC 1C	Nut	2
PARTS AVAILABLE - NOT SHOWN			
	GA6060	Lava Rock	1
	104529-01	Ember Material	1
	104512-01	BallValve	1

ILLUSTRATED PARTS BREAKDOWN

HDV37N
HDV41N



104558

PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 33 of this manual.

DIRECT-VENT FIREPLACE

HDV37N AND HDV41N

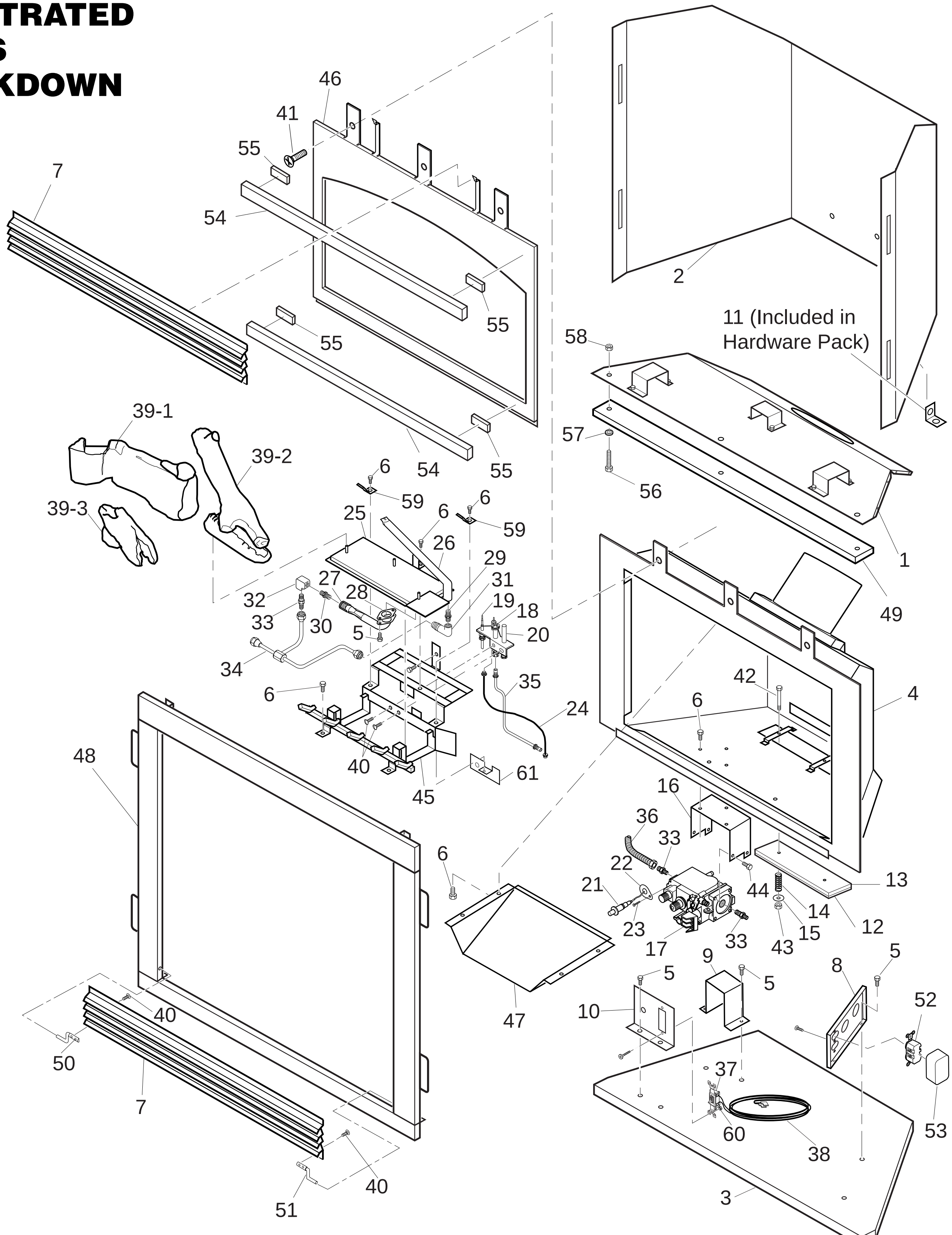
KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104547-02	Top Outer Casing - 37"	1
	104547-01	Top Outer Casing - 41"	1
2	104474-02	Outer Casing - 37"	1
	104474-01	Outer Casing - 41"	1
3	104548-02	Bottom Outer Casing - 37"	1
	104548-01	Bottom Outer Casing - 41"	1
4	104479-04BR	Firebox Assembly - 37"	1
	104479-01BR	Firebox Assembly - 41"	1
5	M11084-26	Screw, Hex	52
6	M11084-46	Screw, Hex	14
7	102455-04	Louver, Extruded - 37"	2
	102455-03	Louver, Extruded - 41"	2
8	104443-01	Firebox Support, Right	1
9	104486-01	Firebox Support, Left	1
10	104482-01	Switch Bracket	1
11	104483-01	Floor Mounting Bracket	2
12	104491-01	Relief Cover	1
13	104518-01	Relief Cover Gasket	1
14	104527-01	Relief Spring	2
15	104528-01	Relief Washer	2
16	104537-01	Valve Bracket	1
17	104496-01	SIT Valve, Natural	1
18	104497-01	SIT Pilot, Natural	1
19	104498-01	Thermocouple	1
20	104499-01	Thermopile	1
21	104500-01	Piezo Ignitor	1
22	104501-01	Ignitor Bracket	1
23	104502-01	Ignitor Screw	1
24	104503-01	Ignitor Wire	1
25	104571-01	Front Burner, Natural-37"	1
	104606-01	Front Burner, Natural-41"	1
26	104572-01	Rear Burner, Natural-37"	1
	104505-01	Rear Burner, Natural-41"	1
27	104488-01	Burner Manifold	1
28	104489-01	Burner Gasket	1
29	104506-04	Orifice	1
30	104506-08	Orifice - 37"	1
	104506-11	Orifice - 41"	
31	104507-01	Brass Elbow	1
32	104574-01	Brass Elbow	1
33	104508-01	Brass Fitting	3
34	104608-02	Aluminum Tubing Assy-37"	1
	104608-01	Aluminum Tubing Assy-41"	1
35	104510-01	Pilot Tubing Assy	1

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
36	101628-04	Flexible Connector	1
37	104514-01	Wall Switch	1
38	104515-01	Wire for Wall Switch	1
39	104575-01	Log Set - 37"	1
	104609-01	Log Set - 41"	1
39-1	104880-02	Rear Log - 37"	1
	104880-01	Rear Log - 41"	1
39-2	104881-02	Front Log - 37"	1
	104881-01	Front Log - 41"	1
39-3	104882-02	Crossover Log - 37"	1
	104882-01	Crossover Log - 41"	1
40	M10908-2	Screw	6
41	M12461-73	Screw	3
42	H5C4-20B	Bolt	2
43	NTC-4C	Locknut	2
44	M12461-26	Screw	4
45	104569-02CJ	Grate Assy - 37"	1
	104569-01CJ	Grate Assy - 41"	1
46	105775-04	Glass Door Assy - 37"	1
	105775-02	Glass Door Assy - 41"	1
47	104490-02CJ	Baffle - 37"	1
	104490-01CJ	Baffle - 41"	1
48	104576-02CK	Front Assembly - 37"	1
	104576-01CK	Front Assembly - 41"	1
49	104615-02	Insulation - 37"	1
	104615-01	Insulation - 41"	1
50	104313-01	Hinge, Pin	1
51	104313-02	Hinge, Pin	1
52	103769-01	Duplex Outlet	1
53	104602-01	Duplex Outlet Cover	1
54	104542-04	Brass Plated Trim - 37"	2
	104542-03	Brass Plated Trim - 41"	2
55	104565-01	Magnet	4
56	104954-01	Screw	3
57	104963-01	Washer	3
58	104955-01	Nut	3
59	104972-01	Burner Bracket	2
60	NPC 1C	Nut	2
61	105180-01	Burner Baffle	1
PARTS INCLUDED - NOT SHOWN			
	GA6060	Lava Rock	1
	104529-01	Ember Material	1
	104512-01	Ball Valve	1

VANGUARD® (B)HDV37N/P AND (B)HDV41N/P
DIRECT-VENT FIREPLACE (NATURAL/PROPANE/LP)

ILLUSTRATED PARTS BREAKDOWN

HDV37P
HDV41P



104558

PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 33 of this manual.

DIRECT-VENT FIREPLACE
HDV37P AND HDV41P

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	104547-02	Top Outer Casing - 37"	1
	104547-01	Top Outer Casing - 41"	1
2	104474-02	Outer Casing - 37"	1
	104474-01	Outer Casing - 41"	1
3	104548-02	Bottom Outer Casing - 37"	1
	104548-01	Bottom Outer Casing - 41"	1
4	104479-04BR	Firebox Assembly - 37"	1
	104479-01BR	Firebox Assembly - 41"	1
5	M11084-26	Screw, Hex	52
6	M11084-46	Screw, Hex	14
7	102455-04	Louver, Extruded - 37"	2
	102455-03	Louver, Extruded - 41"	2
8	104443-01	Firebox Support, Right	1
9	104486-01	Firebox Support, Left	1
10	104482-01	Switch Bracket	1
11	104483-01	Floor Mounting Bracket	2
12	104491-01	Relief Cover	1
13	104518-01	Relief Cover Gasket	1
14	104527-01	Relief Spring	2
15	104528-01	Relief Washer	2
16	104537-01	Valve Bracket	1
17	104496-02	SIT Valve, Propane/LP	1
18	104497-02	SIT Pilot, Propane/LP	1
19	104498-01	Thermocouple	1
20	104499-01	Thermopile	1
21	104500-01	Piezo Ignitor	1
22	104501-01	Ignitor Bracket	1
23	104502-01	Ignitor Screw	1
24	104503-01	Ignitor Wire	1
25	104571-01	Front Burner, LP - 37"	1
	104606-01	Front Burner, LP - 41"	1
26	104572-02	Rear Burner, LP - 37"	1
	104505-02	Rear Burner, LP - 41"	1
27	104488-02	Burner Manifold	1
28	104489-01	Burner Gasket	1
29	104506-15	Orifice-37"	1
	104506-07	Orifice-41"	1
30	104506-09	Orifice-37"	1
	104506-10	Orifice-41"	1
31	104507-01	Brass Elbow	1
32	104574-01	Brass Elbow	1
33	104508-01	Brass Fitting	3
34	104608-02	Aluminum Tubing Assy-37"	1
	104608-01	Aluminum Tubing Assy-41"	1
35	104510-01	Pilot Tubing Assy	1

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
36	101628-04	Flexible Connector	1
37	104514-01	Wall Switch	1
38	104515-01	Wire for Wall Switch	1
39	104575-01	Log Set - 37"	1
	104609-01	Log Set - 41"	1
39-1	104880-02	Rear Log - 37"	1
	104880-01	Rear Log - 41"	1
39-2	104881-02	Front Log - 37"	1
	104881-01	Front Log - 41"	1
39-3	104882-02	Crossover Log - 37"	1
	104882-01	Crossover Log - 41"	1
40	M10908-2	Screw	6
41	M12461-73	Screw	3
42	H5C4-20B	Bolt	2
43	NTC-4C	Locknut	2
44	M12461-26	Screw	4
45	104569-02CJ	Grate Assy - 37"	1
	104569-01CJ	Grate Assy - 41"	1
46	104940-04	Glass Door Assy - 37"	1
	104940-02	Glass Door Assy - 41"	1
47	104490-02CJ	Baffle - 37"	1
	104490-01CJ	Baffle - 41"	1
48	104576-02CK	Front Assembly - 37"	1
	104576-01CK	Front Assembly - 41"	1
49	104615-02	Insulation - 37"	1
	104615-01	Insulation - 41"	1
50	104313-01	Hinge, Pin	1
51	104313-02	Hinge, Pin	1
52	103769-01	Duplex Outlet	1
53	104602-01	Duplex Outlet Cover	1
54	104542-04	Brass Plated Trim - 37"	2
	104542-03	Brass Plated Trim - 41"	2
55	104565-01	Magnet	4
56	104954-01	Screw	3
57	104963-01	Washer	3
58	104955-01	Nut	3
59	104972-01	Burner Bracket	2
60	NPC 1C	Nut	2
61	105180-01	Burner Baffle (37" Only)	1
PARTS AVAILABLE - NOT SHOWN			
	GA6060	Lava Rock	1
	104529-01	Ember Material	1
	104512-01	Ball Valve	1

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model ______________________________

Serial No. ______________________________

Date Purchased ______________________________

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY
DIRECT-VENT FIREPLACE

DESA International warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For information about this warranty write:

DESA
INTERNATIONAL
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004
www.desatech.com

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